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America

NEWS 2 Apr 08 "Ask CAS" for self-help around the clock

NEWS 3 Apr 09 BHELPEN Reload and Implementation of a New Subject Area

NEWS 4 Apr 09 ZDB will be removed from STN

NEWS 5 Apr 19 US Patent Applications available in IICDB,

IFIPAT, and IFUDB

NEWS 6 Apr 22 Records from IP.com available in CAPIUS,

HCAPUS, and ZCAPUS

NEWS 7 Apr 22 BIOSIS Gene Names now available in

TOXCENT

NEWS 8 Apr 22 Federal Research in Progress (FDRIP) now available

NEWS 9 Jun 03 New e-mail delivery for search results now available

NEWS 10 Jun 10 MEDLINE Reload

NEWS 11 Jun 10 PCTFILE has been reloaded

NEWS 12 Jul 02 FORGLI no longer contains STANDARDS file segment

NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;

saved answer sets no longer valid

NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY

NEWS 15 Jul 30 NUTRIST to be removed from STN

NEWS 16 Aug 08 CANCERIT reload

NEWS 17 Aug 08 PHARMAMarket (PHARMAM) - new on STN

NEWS 18 Aug 08 NUS has been reloaded and enhanced

NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN

NEWS 20 Aug 19 IFIPAT, IFUDB, and IFUDB have been reloaded

NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTR has been reloaded

NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced

NEWS 23 Sep 03 JAPIC has been reloaded and enhanced

NEWS 24 Sep 16 Experimental properties added to the REGISTRY file

NEWS 25 Sep 16 Indexing added to some pre-1967 records in

CACAPUS

NEWS 26 Sep 16 CASCION Thesaurus available in CAPIUS and

CA

NEWS 27 Oct 01 CASREACT enriched with Reactions from 1907 to 1985

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d.

CURRENT MACINTOSH VERSION IS V6.0a(NG) AND V6.0a(P).

AND CURRENT DISCOVER FILE IS DATA.DVS

FEBRUARY 2002

NEWS HOT LRS STN Operating Hours Plus Help Desk Availability

NEWS FORTH General Internet Information

NEWS LOGON Welcome Banner and News Items

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FILE 'HOME' ENTERED AT 15:05:39 ON 02 OCT 2002

FILE	ME	LINE	BIOS	CAPUS	COST	IN	U.S.	DOLLARS	SPCT	FILE	TOTAL
									ENTRY	SESSION	
FILE					ESTIMATED					0.21	0.21

FILE 'MEDLINE' ENTERED AT 15:05:47 ON 02 OCT 2002

FILE 'BIOSIS' ENTERED AT 15:05:47 ON 02 OCT 2002
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11 - microcell mediated chromosome transfer
11 - 482 MICROCELL MEDIATED CHROMOSOME TRANSFER

12 - electroporation
12 - 11852 ELECTROPORAT?

13 - 211 AND 12

14 - 2 DUP REM 13
PROCESSING COMPLETED FOR 13
14 - 2 DUP REM 13 (0 DUPLICATES REMOVED)

15 - 11852

14 - ANSWER 1 OF 2 CAPIUS COPYRIGHT 2002 ACS
11 - Detection and interpretation of mutations using animal cell hosts to express human genes present on a single copy of a human chromosome
SO - PCT Int. Appl., 149 pp.
CODEN: PIXXD2

14 - ANSWER 2 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC
11 - Culture of Specialized Cells Series: DNA transfer to cultured cells.
SO - Ravid, K. [Editor], Freshney, R. L. [Editor], (1998) pp. xvi + 296p.
Culture of Specialized Cells Series: DNA transfer to cultured cells.
Publisher: Wiley-Liss, Inc., 605 Third Avenue, New York, New York 10158-0012 USA.
ISBN: 0-471-16572-7

15 - 11852

14 - ANSWER 1 OF 2 CAPIUS COPYRIGHT 2002 ACS
ACCESSION NUMBER 2002 276267 CAPIUS
DOCUMENT NUMBER 136 289911
11 - Detection and interpretation of mutations using animal cell hosts to express human genes present on a single copy of a human chromosome
INVENTOR(S) Beaudet, Arthur, Bodamer, Olaf, Killary, Ann, Foxell, Mercedes

PATENT ASSOCIATES Board of Regents, the University of Texas
System, USA
SOURCE Patent Appl. 14/149
CODE: PIVND2

DOCUMENT TYPE Patent
LANG: AG English

FAMILY ACC: NUM COU: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 2002/29107 A2 20020411 WO 2002/4830965
20021002
WE: AT, AU, NL, AM, AL, AR, AZ, BA, BE, BG, BR, BY, BZ,
CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
GL, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, PE, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
UG,
UZ, VN, YU, ZA, ZW, AM, AR, BY, KG, KZ, MD, RU, TJ,
TM,
RW, GH, GM, KE, LS, MW, MZ, SD, SE, SZ, TZ, UG, ZW, AL,
BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IL, IT, LU, MC, NL, PE, SE, TR,
BE,
BI, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG,
US 2002147067 A1 20020926 US 2001-069861 2001-002
PRIORITY APPL: N, P, F, O, US 2000-237471P, P 20001002
AB: The present invention relates to a method for detection and
interpretation
of loss-of-function or gain-of-function mutations for test genes of
interest. The genes of interest include those associated with inherited
genetic disorders. The method involves testing for gene function by
transferring single copies of individual human chromosomes into a
suitable
host cell. Human cells are obtained from peripheral blood. Transfer
is
preferably by **microcell-mediated chromosome
transfer**. Transfer is screened for anal. of expression of a
marker gene closely linked to the gene of interest. Guidelines for the
selection of host cells and marker genes that can be used to detect
transfer are described. The preferred markers are cell surface
proteins
such as ICAM-1 that can be easily assayed or used for fluorescence
activated cell sorting. The method is demonstrated by detection of a
mutation in the human Fcγ receptor gene on chromosome 19 using
CHO cells
as a host.

14. ANSWER 2 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL
ABSTRACTS INC

ACCESSION NUMBER 1999:118717 BIOSIS

DOCUMENT NUMBER PRIA 199900118717

11111 Culture of Specialized Cells Series, DNA transfer to
cultured cells

AUTHORS Ravid, Katya (1) [Editor], Freshney, R. (1) [Editor]
CORPORATE SOURCE (1) Dep. Biochem., Boston Univ. Med.
Cent., Boston, MA, USA

SOURCE Ravid, K. [Editor], Freshney, R. L. [Editor], (1998)
PP

vol. 2966 Culture of Specialized Cells Series, DNA
transfer

to cultured cells
Publisher: Wiley-Liss, Inc., 605 Third Avenue, New York,

New
York 10158-0012, USA
ISBN: 0-471-46572-7

DOCUMENT TYPE Book, MANUAL
LANG: AG English

AB: This book is part of a series of detailed procedural reference
manuals on
the topic of the culture of specialized cells. The 14 individually
authored chapters contain practices and protocols for such procedures

as
electroporation of DNA into cultured cell lines, calcium phosphate
transfection, and mapping human senescence genes using **microcell
-mediated chromosome transfer**. Each chapter
contains an introduction, a list of materials, stepwise instructions and
references. The volume includes a list of suppliers. This
methodology
text, which is indexed and illustrated with tables and figures, should
be

a valuable reference tool for those interested in the genetic
modification
of human cells for transplantation into genetically deficient hosts,
fundamental research in molecular genetics, regulation of
development in
normal and transformed cells, and the generation of
biopharmaceuticals.

ed his

FILE THOMSON ENTERED AT 15:05:39 ON 02 OCT 2002

FILE MEDLINE BIOSIS, CAPUS ENTERED AT 15:05:47 ON
02 OCT 2002

11 482 S MICROCELL-MEDIATED CHROMOSOME
TRANSFER

12 11852 SELECTROPORAT?

13 2 SELECT AND 12

14 2 DUPLICATES (0 DUPLICATES REMOVED)

is electroporation?

15 172 ELECTROTRANSFECT?

is transfect and electric?

16 26 TRANSFECT AND ELECTRIC?

is transfect? and pulse

17 2095 TRANSFECT? AND PULSE

is chromosome

18 552069 CHROMOSOME

is 17 and 18

19 4117 AND 18

no dup rem 19

PROCESSING COMPLETED FOR 19

110 23 DUPLICATES (18 DUPLICATES REMOVED)

ed his 1-23

110 ANSWER 1 OF 23 MEDLINE DUPLICATE 1
11 Thioredoxin reductase is essential for the survival of Plasmodium
falciparum erythrocytic stages.

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (2002 Jul 19) 277
(29) 25070-5.

Journal code: 2985121R ISSN: 0021-9258.

110 ANSWER 2 OF 23 MEDLINE DUPLICATE 2
11 SY1-SSX is critical for cyclin D1 expression in synovial sarcoma
cells: a

gam of function of the t(X;18)(p11.2;q11.2) translocation.
SO CANCER RESEARCH, (2002 Jul 1) 62 (13) 3861-7.

Journal code: 2984705R ISSN: 0008-5472.

110 ANSWER 3 OF 23 MEDLINE DUPLICATE 3
11 Association of sodium channel gamma-subunit promoter variant
with blood
pressure.

SO HYPERTENSION, (2001 Jul) 38 (1) 86-9.

Journal code: 7906255, ISSN: 1524-4566

E10, ANSWER 4 OF 23 - CAPTUS, COPYRIGHT 2002 ACS
H- Studies on the interaction between actinophage phage C31 and Streptomyces nanchangensis

SO: Hubei Daxue Xuebao, Ziran Kexueban (2001), 23(1), 82-86
CODEN: HDBXJL, ISSN: 1000-2175

E10, ANSWER 5 OF 23 - MEDLINE
H- Circular YAC vectors containing short mammalian origin sequences are maintained under selection as Hela episomes

SO: JOURNAL OF CELLULAR BIOCHEMISTRY, (2000 Jan) 76(4): 674-85
Journal code: 8205766, ISSN: 0730-2312

E10, ANSWER 6 OF 23 - CAPTUS, COPYRIGHT 2002 ACS
H- **Transfection** of muscle cells using low voltage electrical pulses

SO: PCT Int. Appl., 97 pp.
CODEN: PIXND2

E10, ANSWER 7 OF 23 - CAPTUS, COPYRIGHT 2002 ACS
H- **Transfection** of cells of multicellular organisms in vivo using low voltage electrical pulses

SO: PCT Int. Appl., 74 pp.
CODEN: PIXND2

E10, ANSWER 8 OF 23 - MEDLINE
H- Biosynthesis and intracellular targeting of the CTN3 protein defective in

Batten disease.
SO: HUMAN MOLECULAR GENETICS, (1998 Jan) 7(1): 85-90.
Journal code: 9208958, ISSN: 0964-6906

E10, ANSWER 9 OF 23 - MEDLINE
H- Mutation of a conserved cysteine in the X-linked cone opsins causes color

vision deficiencies by disrupting protein folding and stability.
SO: INVESTIGATIVE OPHTHALMOLOGY AND VISUAL SCIENCES, (1997 May) 38(6): 1074-81.
Journal code: 7703701, ISSN: 0146-0404

E10, ANSWER 10 OF 23 - MEDLINE
H- Biochemical and genetic characterization of multiple splice variants of the Fh3 ligand.

SO: BLOOD, (1996 Nov) 88(9): 3371-82
Journal code: 7603509, ISSN: 0006-4971

E10, ANSWER 11 OF 23 - MEDLINE
H- A new and efficient method for gene transfer into mouse LMA cells using

metaphase **chromosomes** by electroporation.
SO: BIOSCIENCE, BIOCHEMISTRY, AND BIOCHEMISTRY, (1996 Nov) 60(11): 1879-81.
Journal code: 9205717, ISSN: 0916-8451

E10, ANSWER 12 OF 23 - MEDLINE
H- Molecular cloning and characterization of murine interleukin-11.
SO: EXPERIMENTAL HEMATOLOGY, (1996 Oct) 24(12): 1369-76
Journal code: 0402313, ISSN: 0191-472X

E10, ANSWER 13 OF 23 - MEDLINE
H- Assembly and localization of the U1-specific snRNP protein in the amphibian oocyte

SO: JOURNAL OF CELL BIOLOGY, (1992 Dec) 119(5): 1037-46
Journal code: 0275356, ISSN: 0021-9525

E10, ANSWER 14 OF 23 - MEDLINE
H- Molecular complementation of a collagen mutation in mammalian cells using

yeast artificial **chromosomes**

SO: EXMO JOURNAL, (1992 Feb) 11(2): 417-22
Journal code: 5268664, ISSN: 0261-4189

E10, ANSWER 15 OF 23 - MEDLINE
H- Characterization of an insulin receptor mutant lacking the subunit processing site

SO: JOURNAL OF BIOLOGICAL CHEMISTRY, (1990 May) 265(15): 8463-9
Journal code: 2985121E, ISSN: 0021-9258

E10, ANSWER 16 OF 23 - MEDLINE
H- Autonomous replication of a DNA fragment containing the chromosomal

replication origin of the human c-myc gene.
SO: NUCLEIC ACIDS RESEARCH, (1990 Mar) 18(5): 1233-42.
Journal code: 0411011, ISSN: 0360-3895

E10, ANSWER 17 OF 23 - MEDLINE
H- Analysis of a soluble mutant des-methionine interleukin-2 receptor alpha

chain (lac protein) produced by **transfected** mammalian cells.
SO: EUROPEAN JOURNAL OF BIOCHEMISTRY, (1990 May) 20(189): 657-65
Journal code: 0107609, ISSN: 0014-2956

E10, ANSWER 18 OF 23 - MEDLINE
H- Analysis of the trans-phenotype of M1 **transfectant** cell lines reveals that M1 activation is accompanied by an interstitial insertion

SO: HUMAN GENETICS, (1990 Feb) 84(3): 274-8.
Journal code: 7613873, ISSN: 0340-6717

E10, ANSWER 19 OF 23 - MEDLINE
H- Intracellular transport of rat serum albumin is altered by a genetically

engineered deletion of the propeptide.
SO: JOURNAL OF BIOLOGICAL CHEMISTRY, (1989 Dec) 264(35): 20843-6.
Journal code: 2985121R, ISSN: 0021-9258

E10, ANSWER 20 OF 23 - MEDLINE
H- Selective secretion of alternatively spliced fibronectin variants.
SO: JOURNAL OF CELL BIOLOGY, (1989 Dec) 109(6 Pt 2): 3445-53.
Journal code: 0378356, ISSN: 0021-9525

E10, ANSWER 21 OF 23 - MEDLINE
H- A frameshift mutation results in a truncated alpha 1-antitrypsin that is

retained within the rough endoplasmic reticulum.
SO: JOURNAL OF BIOLOGICAL CHEMISTRY, (1988 May) 263(15): 7330-5.
Journal code: 2955121R, ISSN: 0021-9258

E10, ANSWER 22 OF 23 - MEDLINE
H- An amino-terminal deletion mutation of pseudorabies virus glycoprotein

gH affects protein localization and RNA accumulation.
SO: JOURNAL OF VIROLOGY, (1988 Oct) 62(10): 3565-73
Journal code: 013724, ISSN: 0022-538X

E10, ANSWER 23 OF 23 - BIOSIS, COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

H- AN X-LINKED GENE AFFECTING MOUSE CELL DNA SYNTHESIS ALSO AFFECTS PRODUCTION OF UNTEGRATED LINEAR AND SUPER COILED DNA OF MURINE EMBRYO

CELLS
SO: MOLECULAR BIOLOGY, (1994) 4(1): 151-159.
CODEN: MCBDD4, ISSN: 0276-7306

cd: jbhah 14,11,7,67

FILE ANSWER 14 OF 23 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 92164627 MEDLINE
DOCUMENT NUMBER: 92164627 PubMed ID: 1537326
TITLE: Molecular complementation of a collagen mutation in
mammalian cells using yeast artificial **chromosomes**

AUTHOR: Straus W.M., Jaenisch R.
CORPORATE SOURCE: Whitehead Institute for Biomedical
Research, Massachusetts
Institute of Technology, Cambridge 02142.
CONTRACT NUMBER: 5E32 (AM) 3756-02 (NIGMS)
SERIAL: 5 CAN 4439-05 (SCD)
BIOCID: 98-01 (NHGRI)
SOURCE: EMBO JOURNAL, (1992 Feb 11) (2) 417-22
Journal code: 8208664 ISSN: 0261-4189.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal Article, JOURNAL ARTICLE
LANGUAGE: English
FILE SIGNATURE: Priority Journals
ENTRY MONTH: 199203
ENTRY DATE: Entered SIN: 19920417
Last Updated on SIN: 19950206
Entered Medline: 19920333

AB: The cloning of large contiguous segments of mammalian DNA in
Saccharomyces cerevisiae has become possible with the advent of Yeast Artificial
Chromosomes (YACs). We are interested in extending the technique
of genetic complementation analysis to the molecular level through
the introduction of YACs into mammalian cells and the mammalian
genome. We report the successful introduction of homogeneous DNA derived
from a 150
Kbp YAC spanning the murine Col1a1 locus into murine fibroblasts
carrying a mutation at this locus. The YAC DNA was fractionated by **pulse**
field electrophoresis, condensed with polyamines, and introduced
into mutant fibroblasts via DNA-lipid micelles. The DNA was integrated
as a stable intact unit in 10% of the **transfected** clones conferring
collagen RNA expression to the mutant cells.

FILE ANSWER 11 OF 23 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 97141609 MEDLINE
DOCUMENT NUMBER: 97141609 PubMed ID: 8987867
TITLE: A new and efficient method for gene transfer into mouse
EM3A cells using metaphase **chromosomes** by
electroporation.

AUTHOR: Ohsu M., Tsuchida E., Tomita H., Taketo A., Kimoto
H., Kishimoto H.
CORPORATE SOURCE: Department of Applied Physics and
Chemistry, Faculty of
Engineering, Fukui University of Technology, Japan.
SOURCE: BIOSCIENCE, BIOTECHNOLOGY, AND
BIOCHEMISTRY, (1996 Nov) 60
(11) 1879-81.
Journal code: 9205177 ISSN: 0916-8451.

PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal Article, JOURNAL ARTICLE
LANGUAGE: English
FILE SIGNATURE: Biotechnology
ENTRY MONTH: 199702
ENTRY DATE: Entered SIN: 19970306
Last Updated on SIN: 19970306
Entered Medline: 19970224
AB: We introduced **chromosome**-mediated genes into mouse thymidine
kinase-deficient (M3 Atk-) cells, by electroporation. The
effects of
some parameters on the electric shock-mediated **transfection** of
EM3 Atk- cells were investigated. Gene transfer of mouse E129
metaphase
chromosome DNA into EM3 Atk- resulted in a maximum frequency

of 3.0×10^{-5} at a cell density of 2.0×10^6 ml and
chromosome dosage of 5.0×10^7 cell equivalents ml in a buffer
containing 0.25 M mannitol, 0.5 mM MgCl₂, 0.1 mM CaCl₂, and 1
mM Tris-HCl.

(pH 7.1). The highest yield of the transformants was obtained at an
electric field strength of 1 kV/cm and a capacitance of 35 microF,
with a
single exponentially decaying **pulse** at 0 degrees C was optimal
for post-shock incubation after electroporation. The tk gene was
detected
in the transformants by in situ hybridization analysis.

FILE ANSWER 7 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 199953426 CAPLUS
DOCUMENT NUMBER: 130106017
TITLE: **Transfection** of cells of multicellular
organisms in vivo using low-voltage electrical
pulses

INVENTOR(S): Bureau, Michel; Mir, Louis; Scherman, Daniel
PATENT ASSIGNMENT(S): Rhone-Poulenc Rorer S.A., Fr., Institut
Gustave
Roussy, Centre National De La Recherche Scientifique
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACCESSION COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9901157	A1	19990114	WO 1998-ER1399	19980630
WE (AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, JP, KR, LC, LK, FR, FI, IV, MG, ME, MN, MX, NO, NZ, PL, RO, SG, SI, SE, SK, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW, GH, GM, GL, IS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BE, BF, CF, CG, CI, CM, GA, GN, ML, ME, NI, SN, TD, TG				
EE 2765241	A1	19981231	FR 1997-8232	19970630
FR 2765241	B1	20010504		
AU 9884446	A1	19990125	A1 1998-84446	19980630
EP 991425	A1	20000412	EP 1998-935066	19980630
	R	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, IL, LU, NL, SE, PT, PL, SI, FI		
BR 9510372	A	20000905	BR 1998-10372	19980630
JP 2002807984	T2	20020312	JP 1999-506529	19980630
NO 9906541	A	20000217	NO 1999-6541	19991229
US 2002012914	M	20020131	US 2000-446690	20000202
PRIORITY APPEN. INFO:			FR 1997-8232	A 19970630
			US 1997-67487P	P 19971201
			WO 1998-ER1299	W 19980630

AB: Nucleic acids are introduced into cells of multicellular organisms
in vivo

by using elec. **pulses** of 1-600 V/cm. The method was
demonstrated using a no. of different tissues (normal and cancerous).
Effects of variation of voltage, **pulse** frequency, duration, etc
on **transfection** were studied.

REFERENCE COUNT: 5 THERE ARE 5 CITED
REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE
REFORMAT

FILE ANSWER 6 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 199958892 CAPLUS
DOCUMENT NUMBER: 130106020
TITLE: **Transfection** of muscle cells using

low-voltage electrical pulses
INVENTOR(S) Bureau, Michel, Mit, Hans, Scherman, Daniel
PATENT CLASSIFICATION Rhône-Poulenc Rore S.A., Fr.; Institut
Gustave

Source Contro National De La Recherche Scientifique
SOLFC PCT Int. Appl., 97 pp.

CODEN PIXND2
DOCUMENT TYPE Patent

LANGUAGE French
FAMILY ACC. NUM. COU. 1, 2
PATENT INFORMATION

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 9901158 A1 19990114 WO 19984R1400 19980630
W. AL, AV, BA, BB, BG, BR, CA, CN, CU, CZ, DE, GL, GW,
HU, ID, IL
IS, JP, KR, LC, TK, FR, FI, IV, MG, MK, MN, MX, NO, NZ,
PL, RO,
SG, SI, SK, SE, TR, TL, UA, US, UZ, VN, YU, AM, AZ, BY,
KG, KZ,
MD, RU, TJ, TM
RW, GE, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY,
DK, ES,
FI, FR, GR, GF, HE, IL, IU, MC, NI, PL, SE, BE, BJ, CL, CG,
CI,
CM, GA, GN, ML, MR, NE, SN, TD, TG
FR 2765242 A1 19981231 FR 19978233 19970630
FR 2765242 B1 20000504
AU 9884447 A1 19990125 AU 199884447 19980630
EP 990426 A1 20000412 EP 1998935067 19980630
R. AL, BE, CH, DE, DK, ES, FR, GB, GR, IL, IU, NI, SE,
PL, RU,
SI, TJ
BR 9810369 A 20000905 BR 199810269 19980630
JP 2002507985 T2 20020312 JP 1999506320 19980630
NO 199906542 A 20000217 NO 19996542 19991229
PRIORITY APPL. INFO.: FR 19978233 A 19970630
US 199767488P P 19971201
WO 19984R1400 W 19980630

AB: Nucleic acids are introduced into cells of multicellular organisms
in vivo

by using elec. pulses of 1-800 V/cm. The method was
demonstrated using a no. of different muscles. Effects of variation of
voltage, pulse frequency, duration, etc. on transfection
were studied.

REFERENCE COUNT: 5 THERE ARE 5 CITED
REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE
REFORMAT

110 ANSWER 5 OF 23 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 2000126825 MEDLINE
DOCUMENT NUMBER: 20120825 PubMed ID: 10653986
TITLE Circular YAC vectors containing short mammalian
origin

sequences are maintained under selection as HeLa

episomes
AUTHOR Nielsen, LO, Cossons NH, Zannis-Hadjopoulos M,
Price GB
CORPORATE SOURCE Department of Pathology, University of
British Columbia,
Vancouver, British Columbia V6T 1Z5, Canada

SOURCE JOURNAL OF CELLULAR BIOCHEMISTRY,
2000, Jan; 76(4):674-85

Journal code: 8205768 ISSN: 0730-2312

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal, Article, JOURNAL ARTICLE
LANGUAGE: English
TITLE SEGMENT: Priority Journals
ENTRY MONTH: 200003
ENTRY DATE: Entered SIN: 20000320
Last Updated on SIN: 20000320
Entered Medline: 20000309

AB: pYAC neo, a 15.8-kb plasmid, contains a bacterial origin, G418-
resistance

gene, and yeast MRS, CEN, and HE elements. Three mammalian
origins have

been cloned into this circular vector, 343, a 448-bp chromosomal
origin

from a transcribed region of human chromosome 6q, X24, a 4.3-kb
element containing the hamster DHFR origin of bidirectional
replication

(orbeta), and S3, a 1.1-kb human anti-circumplex purified
autonomously

replicating sequence. The resulting constructs have been
transfected into HeLa cells, and G418-resistant subcultures were
isolated. The frequency of G418-resistant transformation was 1.7-8.7
times

higher with origin-containing YAC neo than with vector alone. After
45

generations under G418 selection, the presence of episomal versus
integrated constructs was assessed by fluctuation assay and by PCR
of

supercolled, circular, and linear genomic cellular DNAs separated on
ethidium bromide-cesium chloride gradients. In stable G418-resistant
subcultures transfected with vector alone or with linearized
constructs, as well as in some subcultures transfected with
circular origin-containing constructs, resistance was conferred by
integration into the host genome. However, several examples were
found of

G418-resistant transfectants maintaining the Y343 and the
YAC-S3 circular constructs in a strictly episomal state after long-term
culture in selective medium, with 80-90% stability per cell division.

The episomes were found to replicate semiconservatively in a
bromodeoxyuridine

pulse-labeling assay for 4-120 cell generations after
transfection. Furthermore, after 4-172 cell generations rescued
episomal DNA could be isolated intact and unarranged, and could
be used

to retransform bacteria. These versatile constructs, containing
mammalian
origins, have the capacity for further modification with human
telomere or

large putative centromere elements, in an effort to move towards
construction of a human artificial chromosome.
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and his

(FILE HOME) ENTERED AT 15:05:39 ON 02 OCT 2002)

FILE MEDLINE BIOSIS, CAPUS ENTERED AT 15:05:47 ON
02 OCT 2002

11 482 S MICPOCELE MEDIAN CHROMOSOME
TRANSFER

12 11852 S ILE CROPORAT?

13 2 S I1 AND I2

14 2 DUP REM I3 (0 DUPLICATES REMOVED)

15 173 S ILE CROTRANSFECT?

16 26 S TRANSFECT AND ELECTRIC?

17 2095 S TRANSFECT? AND PULS

18 552069 S CHROMOSOME

19 41 S I7 AND I8

110 23 DUP REM I9-I8 DUPLICATES REMOVED

<S I2 or I5 or I7

111 13745 I2 OR I5 OR I7

<S I1 and I1

112 2 I11 AND I1

<S I12 not I3

113 0 I12 NOT I3

<S I8 and I11

114 77418 AND 111

micelle or lipid or liposome
115 84822 MICELLE OR LIPID OR LIPOSOME

114 and 115
116 13114 AND 115

dup tem 116
PROCESSING COMPLETED FOR 116
117 9 DUPLICATE 116 (4 DUPLICATES REMOVED)

diso 117

117 ANSWER 1 OF 9 CAPUS COPYRIGHT 2002 ACS
11 Compositions and methods for the treatment of diseases related to faulty cholesterol regulation
SO: PCT Int. Appl., 75 pp.
CODEN: PIXXD2

117 ANSWER 2 OF 9 CAPUS COPYRIGHT 2002 ACS
11 Detection and interpretation of mutations using animal cell hosts to express human genes present on a single copy of a human **chromosome**
SO: PCT Int. Appl., 149 pp.
CODEN: PIXXD2

117 ANSWER 3 OF 9 CAPUS COPYRIGHT 2002 ACS
11 Methods for binding an exogenous zinc finger protein to cellular chromatin
SO: PCT Int. Appl., 49 pp.
CODEN: PIXXD2

117 ANSWER 4 OF 9 MEDLINE DUPLICATE 1
11 A flow cytometry technique for measuring **chromosome**-mediated gene transfer
SO: CYTOMETRY, (2001 Jun 1) 44 (2) 100-5.
Journal code: 8102328, ISSN: 0196-4763.

117 ANSWER 5 OF 9 CAPUS COPYRIGHT 2002 ACS
11 FACS assisted methods for introducing individual **chromosomes** into cells
SO: PCT Int. Appl., 24 pp.
CODEN: PIXXD2

117 ANSWER 6 OF 9 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
11 Conversion of normal beta-globin to sickle beta-globin by small fragment homologous replacement
SO: Blood, (November 16, 2000) Vol. 96, No. 11 Part 2, pp. 379b.
print.
Meeting Info.: 42nd Annual Meeting of the American Society of Hematology
San Francisco, California, USA December 01-05, 2000 American Society of Hematology
ISSN: 0006-4971

117 ANSWER 7 OF 9 CAPUS COPYRIGHT 2002 ACS
11 methods for prep mammalian artificial **chromosomes** (MACs)
SO: PCT Int. Appl., 248 pp.
CODEN: PIXXD2

117 ANSWER 8 OF 9 MEDLINE
11 A system for generalized mutagenesis of Haemophilus ducreyi
SO: INFECTION AND IMMUNITY, (1995 Aug) 63 (8) 2976-82
Journal code: 0246127, ISSN: 0019-9567

117 ANSWER 9 OF 9 MEDLINE DUPLICATE 2
11 Molecular complementation of a collagen mutation in mammalian cells using yeast artificial **chromosomes**

SO: EMBO JOURNAL, (1992 Feb) 11 (2) 417-22
Journal code: 8208664, ISSN: 0261-4189

duhlab 98,7,5,2

117 ANSWER 9 OF 9 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 92164627 MEDLINE
DOCUMENT NUMBER: 92164627 PubMed ID: 1517326
1111 Molecular complementation of a collagen mutation in mammalian cells using yeast artificial **chromosomes**

AUTHOR: Strauss W M, Jaenisch R
CORPORATE SOURCE: Whitehead Institute for Biomedical Research, Massachusetts
Institute of Technology, Cambridge 02142

CONTRACT NUMBER: 5 E32 GM13756-02 (NIHMS)
5 R35 CA44339-05 (NCI)
HG000198-01 (NIHRI)
SOURCE: EMBO JOURNAL, (1992 Feb) 11 (2) 417-22.
Journal code: 8208664, ISSN: 0261-4189.

PUB. COUNTRY: ENGLAND, United Kingdom
DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199203
ENTRY DATE: Entered SIN: 19920417
Fast Updated on SIN: 19980206
Entered Medline: 19920314

AB: The cloning of large contiguous segments of mammalian DNA in Saccharomyces cerevisiae has become possible with the advent of Yeast Artificial **Chromosomes** (YAC's). We are interested in extending the technique of genetic complementation analysis to the molecular level through the introduction of YAC's into mammalian cells and the mammalian germline. We report the successful introduction of homogeneous DNA derived from a 150 kbp YAC spanning the murine Col1a1 locus into murine fibroblasts carrying a mutation at this locus. The YAC DNA was fractionated by pulse field electrophoresis, condensed with polyamines, and introduced into mutant fibroblasts via DNA-lipid micelles. The DNA was integrated as a stable intact unit in 10% of the **transfected** clones conferring collagen RNA expression to the mutant cells.

117 ANSWER 8 OF 9 MEDLINE
ACCESSION NUMBER: 95347810 MEDLINE
DOCUMENT NUMBER: 95347810 PubMed ID: 7622219
1111 A system for generalized mutagenesis of Haemophilus ducreyi.
AUTHOR: Stevens M K, Cope T D, Radolf J D, Hansen E J
CORPORATE SOURCE: Department of Microbiology, University of Texas
Southwestern Medical Center, Dallas 75235-9048, USA.
CONTRACT NUMBER: AF2011 (NIAD)
CA69082-19 (NCI)
F32-AI08848 (NIAD)
SOURCE: INFECTION AND IMMUNITY, (1995 Aug) 63 (8) 2976-82
Journal code: 0246127, ISSN: 0019-9567.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199508
ENTRY DATE: Entered SIN: 19950911
Fast Updated on SIN: 19990129
Entered Medline: 19950825

AB: The lack of a generalized mutagenesis system for Haemophilus ducreyi has hampered efforts to identify virulence factors expressed by this

sexually transmitted pathogen. To address this issue, the transposable element In1545-delta 3, which encodes resistance to kanamycin, was evaluated for

its ability to insert randomly into the H. ducreyi **chromosome** and produce stable, isogenic mutants. **Electroporation** of H. ducreyi with 1 microgram of plasmid pMSE1 carrying In1545-delta 3 resulted in the production of 10(4) kanamycin-res. transfor-

nants. Southern blot analysis of a number of these transformants indicated that

insertion of the transposon into the **chromosome** occurred at a number of different sites. This pMSE1-based transposon-delivery system was

used to produce an H. ducreyi mutant that expressed an altered lipooligosaccharide (LOS). Passage of this mutant in vitro in the presence or absence of

kanamycin did not affect the stability of the transposon insertion. To confirm that the observed mutant phenotype was the result of the transposon insertion, a chromosomal fragment containing In1545-delta 3 was

cloned from this H. ducreyi LOS mutant. **Electroporation** of the wild-type H. ducreyi strain with this DNA fragment yielded numerous kanamycin-resistant transformants, the majority of which had the

same altered LOS phenotype as the original mutant. Southern blot analysis confirmed the occurrence of proper allelic exchange in the LOS-

deficient transformants obtained in this back cross experiment. The ability of In1545-delta 3 to produce insertion mutations in H. ducreyi should facilitate genetic analysis of this pathogen.

117 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 199718636 CAPLUS
DOCUMENT NUMBER: 12819355

method for prep. mammalian artificial **chromosomes** (MACS)

INVENTOR(S): Hadlaczky, Gyula; Szalay, Aladar A.
PATENT ASSIGNEE(S): Hadlaczky, Gyula; Hung, Szalay, Aladar A.; American

Gene Therapy, Inc.; Biological Research Center of the Hungarian Academy of Sciences; Tomafunda

University
SOURCE: PCT Int. Appl. 243 pp

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

PATENT INFORMATION

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9740183	A2	19971010	WO 1997US5011	19970410
W	AL, AM, AT, AU, AZ, BA, BB, BG, BF, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GR, GU, HK, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LU, LV, LY, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SL, SR, TH, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, EW: AT, BE, BG, CH, CL, CM, DE, DK, ES, FI, FR, GA, GB, GR, HU, IL, IT, MC, ME, MR, NL, NO, PL, SE, SN, TD, TG	US 1996-629822	19960410	
PRIORITY APPL. INFO				
		US 1996-682080	19960715	
		US 1996-695191	19960807	

AB: Methods for prep. cell lines that contain artificial **chromosomes**; methods for prep. of artificial **chromosomes**; methods for purifi. of artificial **chromosomes**; methods for targeted insertion of heterologous DNA into artificial **chromosomes**; and methods for delivery of the **chromosomes** to selected cells and

issues are provided. Also provided are cell lines for use in the methods; and cell lines and **chromosomes** produced by the methods. In particular, satellite artificial **chromosomes** [SATACs] that, except for inserted heterologous DNA, are substantially composed of heterochromatin, are provided. Methods for use of the artificial **chromosomes**, including for gene therapy, prodn. of gene products and prodn. of transgenic plants and animals are also provided.

117 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000201963 CAPLUS

DOCUMENT NUMBER: 13319076

method for introducing individual **chromosomes** into cells

INVENTOR(S): Nolan, Edward M.; Rabassay, Dietmar P.; Hoffmann

Genentech, Inc.; USA
SOURCE: PCT Int. Appl. 24 pp

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACCESSION COUNT: 1

PATENT INFORMATION

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000034436	A2	20000615	WO 1999-US28715	19991203
WO 2000034436	A3	20010920		
W	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GR, GU, HK, HU, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TH, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, EG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, HU, IL, IT, MC, NL, PT, SE, BF, BJ, CL, CG, CI, CM, GA, GN, GW, ML, ME, NE, SN, TD, TG	AI 2000019330	AI 20000626	AI 2000-19330 19991203
US 2002019052	A1	20020214	US 2001-974882	20011010
PRIORITY APPL. INFO			US 1998-110951P	P 19981204
		WO 1999-US28715	W 19991203	
		US 1999-453610	B1 19991204	

AB: The present invention provides methods and app. for the delivery of at

least one **chromosome** into a cell. Invention methods and app. employ FACS or MACS technol. for rapidly processing cells and for confirming the introduction of **chromosomes** into a cell. The introduction of the **chromosomes** into the cell is mediated by one or more of a laser, a linear accelerator or elec. induced fusion of a cell and encapsulated **chromosomes**. Invention methods provide for the rapid and reliable processing assoc. with FACS and MACS technol.

to process thousands of cells a minute, thereby enabling large scale gene transfer.

117 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002276207 CAPLUS

DOCUMENT NUMBER: 136289911

method for detection and interpretation of mutations using animal

cell host to express human genes present on a single copy of a human **chromosome**

INVENTOR(S): Beaudet, Arthur; Bodamer, Olaf; Killary, Ann; Lovell,

Mercedes

- Publisher: Int. Crops Res. Inst. Semi-Arid Trop., Patancheru, India
 CODEN: 59AJAM
- 124 ANSWER 165 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Membrane electroporation: toward a molecular mechanism
 SO: Electro-Magn. Biol. Med., Rev. Res. Pap. World Congr., 1st (1993), 109-11
 Publisher: San Francisco Press
 CODEN: 69JWAS
- 124 ANSWER 166 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Transformation of plant protoplasts with tobacco mosaic virus RNA by using **electroporation**. Plasmid and cationic **liposome**-mediated methods
 SO: Shengwu Huaxue Yu Shengwu Wuli Xuebao (1994), 26(1), 7-13
 CODEN: SHWPAU, ISSN: 0258-2979
- 124 ANSWER 167 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Gene transfer to lentil protoplasts by lipofection and electroporation
 SO: Journal of Liposome Research (1993), 3(2), 707-16
 CODEN: JLRH77, ISSN: 0898-2104
- 124 ANSWER 168 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Artificial ribozymes
 SO: Biochemical Education (1993), 21(3), 139-41
 CODEN: BIEDDX, ISSN: 0267-4412
- 124 ANSWER 169 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Expression of microbial genes in plants
 SO: Microb. Gene Technol., Proc. Natl. Symp. (1991), Meeting Date 1990, 173-9
 Editor(s): Polasa, H. Publisher: South Asian Publishers, New Delhi, India
 CODEN: 59JLAF
- 124 ANSWER 170 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Effects of electroporation conditions on transdermal delivery
 SO: Proc. Int. Symp. Controlled Release Bioact. Mater., 20th (1993), 95-6
 Editor(s): Roseman, Theodore J.; Peppas, Nicholas A.; Gabelnick, Henry J.
 Publisher: Controlled Release Soc., Deerfield, Ill
 CODEN: 59JLAF
- 124 ANSWER 171 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Plant genetic transformation
 SO: Plant Biotechnol. (1992), 151-82. Editor(s): Fowler, Michael W.; Warren, Granar S.; Moo-Young, Murray. Publisher: Pergamon, Oxford, U.K.
 CODEN: 58BXAP
- 124 ANSWER 172 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Evaluation of a stochastic model of electroporation
 SO: Charge Field Eff. Biosyst.-3, [Int. Symp.], 3rd (1992), Meeting Date 1991, 27-84. Editor(s): Allen, Milton J. Publisher: Birkhauser, Boston, Mass.
 CODEN: 57VAAA
- 124 ANSWER 173 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Effect of surface charges on the **electroporation** process in **lipid** bilayers
 SO: Progress in Colloid & Polymer Science (1991), 84(Trends Colloid Interface Sci.), 189-9
 CODEN: PCPSD7, ISSN: 0340-255X
- 124 ANSWER 174 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Introduction of DNA and proteins into cells
 SO: Saishin Igaku (1991), 46(Suppl.), 857-68
 CODEN: SAIGAK, ISSN: 0370-8241
- 124 ANSWER 175 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Electroporation: a unified, quantitative theory of reversible electrical breakdown and mechanical rupture in artificial planar bilayer membranes
 SO: Bioelectrochem. Bioenerg. (1991), 25(2), 163-82
 CODEN: BIBE BP, ISSN: 0302-4598
- 124 ANSWER 176 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: **Electroporation** of **lipid** vesicles by laser electric fields
 SO: Charge Field Eff. Biosyst.-2, [Proc. Int. Symp.] (1989), 233-9
 Editor(s): Allen, Milton J.; Cleary, Stephen L.; Hawkrige, Fred M.
 Publisher: Plenum, New York, N.Y.
 CODEN: 56VZAF
- 124 ANSWER 177 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Establishment of conditions for the transformation of nonaxenic Dictyostelium strains
 SO: Dev. Genet. (N. Y.) (1990), 11(5-6), 391-5
 CODEN: DGNIDW, ISSN: 0192-253X
- 124 ANSWER 178 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Methods for introducing DNA into mammalian cells
 SO: Methods Enzymol. (1990), 185(Gene Expression Technol.), 527-37
 CODEN: MENZAU, ISSN: 0076-6879
- 124 ANSWER 179 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Introduction of foreign DNA into walled plant cells via liposomes injected into the vacuole: a preliminary study
 SO: Physiol. Plant. (1990), 79(1), 184-9
 CODEN: PHPLAE, ISSN: 0031-9317
- 124 ANSWER 180 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Plant transformation by microinjection techniques
 SO: Physiol. Plant. (1990), 79(1), 213-17
 CODEN: PHPLAE, ISSN: 0031-9317
- 124 ANSWER 181 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: The current-voltage relation of an aqueous pore in a lipid bilayer membrane
 SO: Biochim. Biophys. Acta (1990), 1025(1), 10-14
 CODEN: BBAC AQ, ISSN: 0006-3002
- 124 ANSWER 182 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Current topics on gene transfer
 SO: Seisagaku (1988), 60(2), 1341-6
 CODEN: SEIKAQ, ISSN: 0037-1017
- 124 ANSWER 183 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: New methods of transfection of mammalian cells (a minireview)
 SO: Mol. Biol. (Moscow) (1988), 22(6), 1445-50
 CODEN: MOBIIO, ISSN: 0026-8984
- 124 ANSWER 184 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Gene transfection and lymphocyte immortalization: a new approach to human monoclonal antibody production
 SO: Adv. Drug Delivery Rev. (1988), 2(2), 207-28
 CODEN: ADDREP
- Editor(s): 140-159
- 124 ANSWER 140 OF 184 CAPLUS COPYRIGHT 2002 ACS
 H: Dynamics of **Electroporation** of Synthetic **Liposomes** Studied Using a Pore-Mediated Reaction, Ag⁺ + Br⁻ → AgBr
 SO: Journal of Physical Chemistry B (1998), 102(46), 9319-9322
 CODEN: JPCBKE, ISSN: 1089-5647
- 124 ANSWER 141 OF 184 CAPLUS COPYRIGHT 2002 ACS

H: Electroporation of Unilamellar Vesicles Studied by Using a Potentiometer-Mediated
Electron-Transfer Reaction

SO: Langmuir (1998), 14(20), 5802-5805
CODEN: LANGD5, ISSN: 0743-7463

124 ANSWER 142 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Time response of a fluorinating lipid bilayer

SO: Thin Solid Films (1998), 327-329, 796-799
CODEN: THINAP, ISSN: 0040-6090

124 ANSWER 143 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Topical delivery of antisense oligonucleotide in the skin

SO: Proceedings of the International Symposium on Controlled Release of
Bioceramic Materials (1998), 25th, 226-227
CODEN: PCBMFY, ISSN: 1027-0178

124 ANSWER 144 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Effect of noise on bilayer lipid membranes

SO: Biophysics Letters (1998), 43(1), 101-105
CODEN: BPLHJ, ISSN: 0295-5075

124 ANSWER 145 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Improving the intracellular delivery and molecular efficacy of

oligonucleotides in chronic myeloid leukemia cells: a comparison of
streptolysin-D permeabilization, electroporation, and lipophilic
conjugation
SO: Blood (1998), 91(12), 4733-4746
CODEN: BLOOAW, ISSN: 0006-4971

124 ANSWER 146 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Improving the effectiveness of non-viral gene transfer methods

SO: Cellular & Molecular Biology Letters (1997), 2(Suppl. 1),
Biophysics of
Membrane Transport, Pt. 1, 97-110
CODEN: CMBLEF, ISSN: 1425-8153

124 ANSWER 147 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Kinetics of the **electroporative** deformation of **lipid**

vesicles and biological cells in an electric field
SO: Berichts der Bunsen-Gesellschaft (1998), 102(4), 670-675
CODEN: BBPGAX, ISSN: 0940-483X

124 ANSWER 148 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Detection of **electroporation** of **liposomes** by means of

a fast electron transfer reaction
SO: Book of Abstracts, 215th ACS National Meeting, Dallas, March
29-April 2
(1998), COLE-168 Publisher: American Chemical Society,
Washington, D. C.
CODEN: 65Q1AA

124 ANSWER 149 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Transdermal delivery of macromolecules: recent advances by

modification of
skin's barrier properties
SO: ACS Symposium Series (1997), 675(Therapeutic Protein and
Peptide
Formulation and Delivery), 124-153
CODEN: ACSMCS, ISSN: 0097-6156

124 ANSWER 150 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Electroinjection of glycoporphin A in interdigitated-fusion giant

unilamellar lipid vesicles
SO: Journal of Biological Chemistry (1997), 272(41), 25524-25530
CODEN: JBCHAY, ISSN: 0021-9258

124 ANSWER 151 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Changes in the electrical properties of the skin external layer during

pulse electro-treatment
SO: Biol. Membr. (1997), 4(3), 299-309
CODEN: BIMEF9, ISSN: 0233-4755

124 ANSWER 152 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Direct transfection of polymerase chain reaction-generated DNA

fragments
into mammalian cells employing ethidium bromide indicator and
ultrafiltration
SO: Analytical Biochemistry (1997), 248(1), 190-193
CODEN: ANBICA, ISSN: 0003-2697

124 ANSWER 153 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Electrooptics of membrane electroporation and vesicle shape

deformation
SO: Current Opinion in Colloid & Interface Science (1996), 1(6), 790-
799
CODEN: COCSEI, ISSN: 1359-0294

124 ANSWER 154 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Titration of Electro-optics of membrane **electroporation** in

diphenylhexatriene-doped **lipid** bilayer vesicles (Biophys. Chem.,
58 (1996) 109-116; (BIOCHIM 2093) 1
SO: Biophys. Chem. (1996), 60(3), 153-153
CODEN: BIOCHZ, ISSN: 0301-4622

124 ANSWER 155 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Tissue electroporation for localized drug delivery

SO: Advances in Chemistry Series (1995), 250(Electromagnetic Fields),
301-16
CODEN: ADCSAI, ISSN: 0065-2393

124 ANSWER 156 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Construction of different expression vectors containing interleukin -

2
(IL-2) gene and their expressions in eukaryotic cells
SO: Shengwu Huaxue Yu Shengwu Wuli Xuebao (1995), 27(3), 247-53
CODEN: SHWPAU, ISSN: 0582-9879

124 ANSWER 157 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Apparatus and method for efficient incorporation of molecules into

cells
SO: Polym. Appl. 44 pp.
CODEN: PINXID

124 ANSWER 158 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Delivery of protein p to cells using polycationic liposomes

SO: BioTechniques (1995), 19(1), 72-8
CODEN: BTNQDQ, ISSN: 0736-6205

124 ANSWER 159 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Insertion of glycoporphin A, a transmembranous protein, in lipid

bilayers
can be mediated by electroporeabilization
SO: European Journal of Biochemistry (1995), 230(2), 722-32
CODEN: EJBICJ, ISSN: 0014-2956

ed p 120-139

124 ANSWER 120 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

H: GENE TRANSFER IN CEREBALS
SO: Science (Washington, D. C., 1883-) (1987) 236 (4806), 1259-
1262
CODEN: SCIEAS, ISSN: 0036-8075

124 ANSWER 121 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: The study of plant genetic transformation

SO: Kexue Nongye (Agriculture) (1999), 47(3-4), 112-119
CODEN: KHNBYR, ISSN: 0452-2230

124 ANSWER 122 OF 184 CAPLUS COPYRIGHT 2002 ACS
H: Nonviral methods for gene transfer

SO: Blood Cell Biochemistry (1999), 8(1) Hematopoiesis and Gene
Therapy, 12-154
CODEN: BCBHFE, ISSN: 1078-0491

124 ANSWER 123 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Antisense oligonucleotides: strategies for delivery

SO Pharmaceutical Science & Technology Today (1998), 1(9), 377-386

CODEN: PSTHEX; ISSN: 1461-7547

124 ANSWER 124 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Cholesterol-induced variations in fluctuations of the pores in bilayer lipid membrane

SO Cellular & Molecular Biology Letters (1999), 4(4), 567-582

CODEN: CMBLEU; ISSN: 1423-8153

124 ANSWER 125 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Creation of transdermal pathways for macromolecule transport by skin electroporation and a low toxic pathway-enlarging molecule

SO Bioelectrochemistry and Bioenergetics (1999), 49(1), 11-20

CODEN: BEBEBP; ISSN: 0302-4598

124 ANSWER 126 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Status of sperm-mediated delivery methods for gene transfer

SO Transgenic Animals in Agriculture, [Papers presented at a Conference], Tahoe City, Calif., Aug., 1997 (1999), Meeting Date 1997, 87-95

Editor(s): Murray, James D. Publisher: CABI Publishing, Wallingford, UK

CODEN: 68ABAX

124 ANSWER 127 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Expression of heterologous integrin genes

SO Methods in Molecular Biology (Totowa, New Jersey) (1999), 129(Integrin

Protocol(s)), 125-134

CODEN: NMBIED; ISSN: 1064-3745

124 ANSWER 128 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Enhancement of transdermal iontophoretic delivery of a liposomal formulation of colchicine by electroporation

SO Drug Delivery (1999), 6(2), 111-115

CODEN: DDELEB; ISSN: 1071-7544

124 ANSWER 129 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Study of conductance changes of bilayer lipid membrane induced by electric field

SO Biophysicae Membranae (1999), 16(1), 95-102

CODEN: BIVHLE; ISSN: 0233-4755

124 ANSWER 130 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Membrane electroporation and electromechanical deformation of vesicles and cells

SO Faraday Discussions (1999), Volume Date 1998, 111(Molecular Interactions of Biomembranes), 111-125

CODEN: FDISLE; ISSN: 0301-7249

124 ANSWER 131 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Gene transfer into retinoblastoma cells

SO BioTechniques (1999), 26(3), 444-446

CODEN: BTNQDO; ISSN: 0736-6205

124 ANSWER 132 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Characterization of a dextran-based bifunctional calcium indicator immobilized in cells by the enzymatic addition of isoprenoid lipids

SO Cell Calcium (1999), 25(1), 1-7

CODEN: CECADV; ISSN: 0143-4160

124 ANSWER 133 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Optimization of Electroporation for Biochemical Experiments in Live Cells

SO Biochemical and Biophysical Research Communications (1999), 256(1),

235-239

CODEN: BBRCAN; ISSN: 0006-291X

124 ANSWER 134 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Viscosity and Inertia-Limited Rupture of Dextran-Supported Black Lipid

Membranes

SO Journal of Physical Chemistry B (1999), 103(9), 1402-1407

CODEN: JPCBEK; ISSN: 1089-5647

124 ANSWER 135 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Evaluation of exogenous gene direct transferring techniques

SO Shengming Kezue Yanjiu (1998), 2(3), 172-176

CODEN: SKYALF; ISSN: 1007-7847

124 ANSWER 136 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Effects of electrophoresis and electroporation on the stratum corneum: Review of the biophysical studies

SO Advanced Drug Delivery Reviews (1999), 35(1), 89-105

CODEN: ADDREP; ISSN: 0169-409X

124 ANSWER 137 OF 184 CAPLUS COPYRIGHT 2002 ACS

II A practical assessment of transdermal drug delivery by skin electroporation

SO Advanced Drug Delivery Reviews (1999), 35(1), 61-76

CODEN: ADDREP; ISSN: 0169-409X

124 ANSWER 138 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Mechanistic studies of molecular transdermal transport due to skin electroporation

SO Advanced Drug Delivery Reviews (1999), 35(1), 41-60

CODEN: ADDREP; ISSN: 0169-409X

124 ANSWER 139 OF 184 CAPLUS COPYRIGHT 2002 ACS

II Theory of electrical creation of aqueous pathways across skin transport barriers

SO Advanced Drug Delivery Reviews (1999), 35(1), 21-39

CODEN: ADDREP; ISSN: 0169-409X

Editor(s):

124 ANSWER 140 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

II Electroporation of human skin: Simultaneous measurement of changes in the

transport of two fluorescent molecules and in the passive electrical properties.

SO Bioelectrochemistry and Bioenergetics, (1996) Vol. 39, No. 1, pp. 1-12

ISSN: 0302-4598.

124 ANSWER 141 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

II Factors affecting transdermal delivery of metoprolol by electroporation.

SO Bioelectrochemistry and Bioenergetics, (1995) Vol. 38, No. 1, pp. 223-238

ISSN: 0302-4598.

124 ANSWER 142 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

II Analysis of enhanced transdermal transport by skin electroporation

SO Journal of Controlled Release, (1995) Vol. 34, No. 3, pp. 211-221

ISSN: 0168-3659.

124 ANSWER 143 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

II GENETIC ENGINEERING OF MICROALGAE FOR FUEL PRODUCTION SCIENTIFIC NOT.

SO THIRTIETH SYMPOSIUM ON BIOTECHNOLOGY FOR FUELS AND CHEMICALS, COLORADO

SPRINGS, COLORADO, U.S.A. MAY 6-10, 1991 APPL BIOCHEM

BIOTECHNOL. (1992)

34:38 (6), 371-379

CODEN: ABIBDI, ISSN: 0273-2229

124 ANSWER 114 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. BIOPHYSICAL CONSIDERATIONS OF MEMBRANE
ELECTROPORATION

SO: CHANG, D. C. L. L. A. GUIDE TO
ELECTROPORATION AND ELECTROFUSION

USA: SSI, ACADEMIC PRESS, INC., SAN DIEGO, CALIFORNIA,
1991, 130pp, 150g, 0-12-345678-9

UK: HILLIS, C. (1992) (6), 77-90

ISBN: 0-12-16804-5, PAPER, 0-12-168040-1 (CLOTH)

124 ANSWER 115 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. ELECTRO-CONTROLLED GENE TRANSFER TO HIGHER PLANTS
USING CATIONIC LIPOSOMES

SO: THORPE, A. P. L. (1991) (3), 11-15

CODEN: THAGAG, ISSN: 0040-5752

124 ANSWER 116 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. ELECTROPORATION OF CELL MEMBRANES

SO: Biophys. J. (1991) (6), 297-306

CODEN: BIOJAL, ISSN: 0006-3495

124 ANSWER 117 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. TRANSIENT EXPRESSION OF GENES IN THE OOMYCEITE
PHYTOPHOREA INFLUENS USING

BREMIAT ACTUAL REGULATORY SEQUENCES

SO: CURRANT, J. (1991) (6), 45-460

CODEN: CUGIDS, ISSN: 0172-8063

124 ANSWER 118 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. GENE TRANSFER TO PLANTS: ASSESSMENT OF
PUBLISHED APPROACHES AND RESULTS

SO: BRIGGS, W. R. (ED.) ANNUAL REVIEW OF PLANT
PHYSIOLOGY AND PLANT MOLECULAR

BIOLOGY, VOL. 42, NO. 762, ANNUAL REVIEWS, INC.,
PALO ALTO, CALIFORNIA

USA: HILLIS, C. (1991) (6), 207-226

CODEN: ARPHIX, ISSN: 0040-2519, ISBN: 0-8243-0642-2

124 ANSWER 119 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. SYNTHESIS OF POLYVIRAL RNA AND PROTEINS IN
TOBACCO MESOPHYLL PROTOPLASTS

INOCULATED BY ELECTROPORATION

SO: PLANT SCI (SHANGHAI) (1987) 51 (2-3), 295-304

CODEN: PISCH4, ISSN: 0168-9452

124 ANSWER 120 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

11. GENE TRANSFER BY ELECTROPORATION

SO: Science (Washington, D.C.) 188 (4), (1987) 236 (4806), 1259-
1262

CODEN: SCIEAS, ISSN: 0036-8075

124 ANSWER 121 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. The study of plant genetic transformation

SO: K. S. N. (1999) 47 (3-4), 112-119

CODEN: KINBYB, ISSN: 0452-2230

124 ANSWER 122 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Novel method for gene transfer

SO: Blood Cells (Biochem. J.) (1999) 8 (Hematopoiesis and Gene
Therapy) 123-134

CODEN: BCBFBL, ISSN: 1078-0491

124 ANSWER 123 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Antisense oligonucleotides: strategies for delivery

SO: Pharmaceutical Science & Technology Today (1998) 1 (9), 377-
386

CODEN: PSUTES, ISSN: 1461-5247

124 ANSWER 124 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Cholesterol-induced variations in fluctuations of the pores in bilayer
lipid membrane

SO: Cellular & Molecular Biology Letters (1999) 4 (4), 567-582

CODEN: CMBLTL, ISSN: 1425-8153

124 ANSWER 125 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Creation of transdermal pathways for macromolecule transport by
skin

electroporation and a low toxicity, pathway-enlarging molecule

SO: Bioelectrochemistry and Bioenergetics (1999) 49 (1), 11-20

CODEN: BIEBEP, ISSN: 0302-4598

124 ANSWER 126 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Status of sperm-mediated delivery methods for gene transfer

SO: Transgenic Animals in Agriculture. [Papers presented at a
Conference].

Tahoe City, Calif., Aug., 1997 (1999). Meeting Date 1997, 87-95.

Editor(s): Murray, James D. Publisher: CABI Publishing,

Wallingford, UK

CODEN: 68ABAX

124 ANSWER 127 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Expression of heterologous integrin genes

SO: Methods in Molecular Biology (Totowa, New Jersey) (1999),
129 (Integrin

Protocols), 125-134

CODEN: MMBIED, ISSN: 1064-3745

124 ANSWER 128 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Enhancement of transdermal iontophoretic delivery of a liposomal
formulation of colchicine by electroporation

SO: Drug Delivery (1999) 6 (2), 111-115

CODEN: DDELTB, ISSN: 1071-7544

124 ANSWER 129 OF 184 CAPLUS COPYRIGHT 2002 ACS

11. Study of conductance changes of bilayer lipid membrane induced by
electric

field

SO: Biologicheskoe Membrany (1999), 16 (1), 95-102

CODEN: BIMEF9, ISSN: 0233-4755

edit so 100-119

124 ANSWER 100 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

11. Local transport regions (LTRs) in human stratum corneum due to
long and

short 'high voltage' pulses.

SO: Bioelectrochemistry and Bioenergetics, (Nov., 1998) Vol. 47, No.
1, pp.

151-161

ISSN: 0302-4598.

124 ANSWER 101 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

11. Electroporation and electrofusion of human lymphoma cells
modified

by proteolytic enzymes.

SO: Bioelectrochemistry and Bioenergetics, (Oct., 1998) Vol. 46, No. 2,
pp.

265-265

ISSN: 0302-4598.

124 ANSWER 102 OF 184 BIOSIS COPYRIGHT 2002

BIOLOGICAL ABSTRACTS INC.

11. Cell biology, Vol. 2. Second edition.

SO: Cells, J. L. (Editor) (1998) pp. xlix + 525p. Cell biology, Vol. 3.

Second

edition

Publisher: Academic Press, Inc., 1250 Sixth Ave., San Diego,

California

92101, USA

ISBN: 0-12-164728-5

I24 ANSWER 103 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Electroporation of poly(phenol-phosphatidylcholine) bilayer
lipid membranes.

SO Bioelectrochemistry and Bioenergetics, (May, 1998) Vol. 45, No.
2, pp.

215-220

ISSN: 0302-4598

I24 ANSWER 104 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Electroporation of the vacuole-attached patch-clamp configuration
allows

access to the tonoplast resistance and estimation of its specific
conductance

SO Plant Science (Shannon), (April 6, 1998) Vol. 133, No. 1, pp. 91-
103.

ISSN: 0168-9452.

I24 ANSWER 105 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Electroporative deformation of salt filled lipid
vesicles.

SO European Biophysics Journal, (1998) Vol. 27, No. 1, pp. 43-53.
ISSN: 0175-7571.

I24 ANSWER 106 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Biotechnology: Miracle of mirage transgenic plants: Progress and
potence.

SO Journal of Phytochemical Research, (1995) Vol. 8, No. 1, pp. 1-26.
ISSN: 0970-5767.

I24 ANSWER 107 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Theory of electroporation: A review.

SO Bioelectrochemistry and Bioenergetics, (1996) Vol. 41, No. 2, pp.
135-160.

ISSN: 0302-4598.

I24 ANSWER 108 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Theoretical studies of the outermost skin layer electrohydration.

SO Biokhicheskoe Membrany (Moscow), (1996) Vol. 13, No. 5, pp.
552-560.

ISSN: 0233-4755.

I24 ANSWER 109 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Do high-voltage pulses cause changes in skin structure.

SO Journal of Controlled Release, (1996) Vol. 40, No. 3, pp. 321-326.
ISSN: 0168- 659.

I24 ANSWER 110 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Electroporation of human skin. Simultaneous measurement of
changes in the
transport of two fluorescent molecules and in the passive electrical
properties

SO Bioelectrochemistry and Bioenergetics, (1996) Vol. 39, No. 1, pp.
1-12.

ISSN: 0302-4598

I24 ANSWER 111 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Factors affecting transdermal delivery of metoprolol by
electroporation.

SO Bioelectrochemistry and Bioenergetics, (1998) Vol. 38, No. 1, pp.
223-238.

ISSN: 0302-4598

I24 ANSWER 112 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II Analysis of enhanced transdermal transport by skin electroporation

SO Journal of Controlled Release, (1995) Vol. 34, No. 3, pp. 211-221
ISSN: 0168-6599

I24 ANSWER 113 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II GENETIC ENGINEERING OF MICROORGANISMS FOR FUEL
PRODUCTION SCIENTIFIC SOCIETY

SO THIRTH INTERNATIONAL SYMPOSIUM ON BIOTECHNOLOGY FOR
FUELS AND CHEMICALS, COLORADO

SPRINGS, COLORADO, USA, MAY 6-10, 1997, APPL. BIOCHEM.
BIOTECHNOL. (1997)

34: (5-6), 351-339

CODEN: ABBIID, ISSN: 0273-2789

I24 ANSWER 114 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II BIOPHYSICAL CONSIDERATIONS OF MEMBRANE
ELECTROPORATION

SO CHANG, D. C. ET AL. (EDS), GUIDE TO
ELECTROPORATION AND ELECTROFUSION.

X: 58P, ACADEMIC PRESS, INC., SAN DIEGO, CALIFORNIA,
USA, LONDON, ENGLAND.

UK, HUIS, (1992) 000 77-90.

ISBN: 0-12-168041-X (PAPER), 0-12-168040-1 (CLOTH)

I24 ANSWER 115 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II BIOPHYSICAL CONSIDERATIONS OF MEMBRANE
ELECTROPORATION

SO THOR, APPL. GENET. (1991) 83 (1), 1-5

CODEN: THAGAG, ISSN: 0040-5752.

I24 ANSWER 116 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II ELECTROPORATION OF CELL MEMBRANES

SO Biophys. J. (1991) 60 (2), 297-306

CODEN: BIOJAU, ISSN: 0006-3495.

I24 ANSWER 117 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II TRANSIENT EXPRESSION OF GENES IN THE OOMYCETE
PHYTOPHTHORA INFESTANS USING

BREXIN-LACTUCAL REGULATORY SEQUENCES.

SO CURR. GENET. (1991) 29 (6), 457-460.

CODEN: CUGED5, ISSN: 0172-8083.

I24 ANSWER 118 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II GENETIC TRANSFER TO PLANTS: ASSESSMENT OF
PUBLISHED APPROACHES AND RESULTS.

SO BRIGGS, W. F. (ED), ANNUAL REVIEW OF PLANT
PHYSIOLOGY AND PLANT MOLECULAR

BIOLOGY, VOL. 42, XII-762P, ANNUAL REVIEWS, INC.,
PALO ALTO, CALIFORNIA.

USA, HUIS, (1991) 000, 205-226

CODEN: ARBPEN, ISSN: 1040-2519, ISBN: 0-8243-0642-2

I24 ANSWER 119 OF 184 BIOSIS COPYRIGHT 2002
BIOLOGICAL ABSTRACTS INC.

II SYNTHESIS OF POLYMER RNA AND PROTEINS IN
TOBACCO MESOPHYLL PROTOPLASTS

INDUCED BY ELECTROPORATION

SO PLANT SCI (SHANNON) (1987) 51 (2-3), 295-304
CODEN: PISCE4, ISSN: 0168-9452.

edn 80-99

- I24 ANSWER 80 OF 184 MEDLINE
II Comparison of **liposome** fusion and **electroporation** for the intracellular delivery of nonpermeant molecules to adherent cultured cells.
SO JOURNAL OF PHARMACOLOGICAL AND TOXICOLOGICAL METHODS. (1991 Feb) 29 (1) 29-35.
Journal code: 9206091. ISSN: 1056-8719.
- I24 ANSWER 81 OF 184 MEDLINE
II **Electroporation** and conventional **liposomes** efficiently deliver soluble protein into the MHC class I presentation pathway. Priming in vitro and in vivo for class I-restricted recognition of soluble antigen.
SO JOURNAL OF IMMUNOLOGICAL METHODS. (1993 Mar) 151 160 (1) 49-57.
Journal code: 1305440. ISSN: 0022-1759.
- I24 ANSWER 82 OF 184 MEDLINE
II Multidrug resistance: prospects for clinical management.
SO SCIENCE BULLETIN: BIOCHEMISTRY AND BIOTECHNOLOGY. (1992 Jan) 5 43-52. Ref: 35.
Journal code: 8917420. ISSN: 1052-6781.
- I24 ANSWER 83 OF 184 MEDLINE
II Increased binding of liposomes to cells by electric treatment.
SO BIOCHEMICAL BIOPHYSICAL ACTA. (1991 Nov) 18 (1070 (1) 193-7.
Journal code: 0217513. ISSN: 0006-3002.
- I24 ANSWER 84 OF 184 MEDLINE
II Influence of phloretin and alcohols on barrier defects in the erythrocyte membrane caused by oxidative injury and electroporation.
SO BIOCHEMICAL BIOPHYSICAL ACTA. (1991 Aug) 26 (1067 (2) 111-22.
Journal code: 0217513. ISSN: 0006-3002.
- I24 ANSWER 85 OF 184 MEDLINE
II Lipid peroxidation in **electroporated** hepatocytes occurs much more readily than does hydroxyl-radical formation.
SO BIOCHEMICAL JOURNAL. (1991 Aug) 1 (277 (Pt 3) 767-71.
Journal code: 2984726R. ISSN: 0264-6021.
- I24 ANSWER 86 OF 184 MEDLINE
II Liposome mediated in vitro transfection of pancreatic islet cells.
SO BIOCHEMICAL BIOPHYSICAL ACTA. (1990) 49 (12) 1157-64.
Journal code: 8304435. ISSN: 0232-766X.
- I24 ANSWER 87 OF 184 MEDLINE
II Gene transfer methods for plants and cell cultures.
SO CIRCA FOUNDATION SYMPOSIUM. (1990) 154 (98-208) discussion 208-12. Ref: 75.
Journal code: 0256636. ISSN: 0300-5203.
- I24 ANSWER 88 OF 184 MEDLINE
II Facilitative properties of Semliki Forest virus nucleocapsid protein.
SO JOURNAL OF VIROLOGY. (1990 Oct) 64 (10) 5123-31.
Journal code: 013724. ISSN: 0022-538X.
- I24 ANSWER 89 OF 184 MEDLINE
II Coexpression of the platelet-derived growth factor (PDGF) B chain and the PDGF beta receptor in isolated pancreatic islet cells stimulates DNA synthesis.
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. (1990 Aug) 87 (15) 5807-11.
Journal code: 7505876. ISSN: 0027-8424.
- I24 ANSWER 90 OF 184 MEDLINE
II Retrovirus vector-mediated gene transfer into hepatocytes.
SO MOLECULAR BIOLOGY AND MEDICINE. (1989 Apr) 6 (2) 117-25. Ref: 65.
Journal code: 8403879. ISSN: 0735-1112.
- I24 ANSWER 91 OF 184 MEDLINE
II Analysis of the effect of medium and membrane conductance on the amplitude and kinetics of membrane potentials induced by externally applied electric fields.
SO BIOPHYSICAL JOURNAL. (1989 Jul) 56 (1) 121-8.
Journal code: 079626. ISSN: 0006-3495.
- I24 ANSWER 92 OF 184 MEDLINE
II Semliki Forest virus capsid protein acts as a pleiotropic regulator of host cellular protein synthesis.
SO JOURNAL OF VIROLOGY. (1989 Jul) 63 (7) 2921-8.
Journal code: 013724. ISSN: 0022-538X.
- I24 ANSWER 93 OF 184 MEDLINE
II Gene transfer from targeted **liposomes** to specific lymphoid cells by **electroporation**.
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. (1988 Nov) 85 (21) 8027-31.
Journal code: 7505876. ISSN: 0027-8424.
- I24 ANSWER 94 OF 184 MEDLINE
II Model of cell electrofusion. Membrane electroporation, pore coalescence and percolation.
SO BIOPHYSICAL CHEMISTRY. (1987 May) 9 (26 (2-3) 321-35.
Journal code: 0403171. ISSN: 0301-4622.
- I24 ANSWER 95 OF 184 MEDLINE
II Secretion of apolipoprotein A-I in lipoprotein particles following transfection of the human apolipoprotein A-I gene into 3T3 cells.
SO JOURNAL OF BIOLOGICAL CHEMISTRY. (1987 Jul) 5 (262 (19) 8944-7.
Journal code: 2985121R. ISSN: 0021-9258.
- I24 ANSWER 96 OF 184 MEDLINE
II Gene transfer into mouse lymphoma cells by electroporation in high electric fields.
SO EMBO JOURNAL. (1982) 1 (7) 841-5.
Journal code: 8208664. ISSN: 0261-4189.
- I24 ANSWER 97 OF 184 MEDLINE
II Stochastic model for electric field-induced membrane pores. Electroporation.
SO BIOPHYSICAL CHEMISTRY. (1984 May) 19 (3) 211-25.
Journal code: 0403171. ISSN: 0301-4622.
- I24 ANSWER 98 OF 184 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
II Methods of in vivo gene transfer into bladder without viral vectors.
SO Journal of the Osaka City Medical Center. (Dec.) 1999 Vol. 48, No. 3-4.
pp. 435-442.
ISSN: 0386-4103.
- I24 ANSWER 99 OF 184 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
II Comparison of **lipid**-mediated transfection and **electroporation** of human T cell lines.
SO Immunology. (Dec.) 1998 Vol. 95, No. SUPPL. 1, pp. 31.
Meeting Info.: 6th Annual Congress of the British Society for Immunology.
Harrogate, England, UK December 1-4, 1998.
ISSN: 0019-2805.

124 ANSWER 60 OF 184 MEDLINE

11 Changes in the passive electrical properties of human stratum corneum due to electroporation

SO BIOCHEMICAL AND BIOPHYSICAL ACTA (1995 Nov 1) 1239 (2) 113-21

Journal code: 0217513 ISSN: 0006-3002

124 ANSWER 61 OF 184 MEDLINE

11 Millisecond measurement of transport during and after an electroporation pulse

SO BIOPHYSICAL JOURNAL (1995 May) 68 (5) 1864-70

Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 62 OF 184 MEDLINE

11 Mechanism of electroinduced ionic species transport through a multilamellar lipid system

SO BIOPHYSICAL JOURNAL (1995 Mar) 68 (3) 749-65

Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 63 OF 184 MEDLINE

11 Role of lipid peroxidation in electroporation-induced cell permeability

SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS (1995 Apr 17) 209 (2) 417-25

Journal code: 0372516 ISSN: 0006-291X

124 ANSWER 64 OF 184 MEDLINE

11 Transdermal delivery of metoprolol by electroporation

SO PHARMACEUTICAL RESEARCH (1994 Nov) 11 (11) 1657-62

Journal code: 8406521 ISSN: 0724-8741

124 ANSWER 65 OF 184 MEDLINE

11 Fusogenic activity of amino-terminal region of HIV type 1 Nef protein

SO AIDS RESEARCH AND HUMAN RETROVIRUSES (1994 Oct) 10 (10) 1271-40

Journal code: 8709376 ISSN: 0889-2229

124 ANSWER 66 OF 184 MEDLINE

11 Electroporation enhances cell membrane peroxidation and luminescence

SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS (1995 Jan 5) 206 (1) 238-45

Journal code: 0372516 ISSN: 0006-291X

124 ANSWER 67 OF 184 MEDLINE

11 Electroporation of the photosynthetic membrane: structural changes in protein and lipid-protein domains

SO BIOPHYSICAL JOURNAL (1994 Sep) 67 (3) 1060-6

Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 68 OF 184 MEDLINE

11 Oxidative damage of the membrane lipids after electroporation

SO CELLULAR PHYSIOLOGY AND BIOPHYSICS (1994 Apr) 13 (2) 85-97

Journal code: 8406604 ISSN: 0271-5882

124 ANSWER 69 OF 184 MEDLINE

11 Freeze-fracturing studies on human erythrocyte membranes effected by external pulsed electrical field

SO SHIH-YEN SHENG WU HSUEH PAO [JOURNAL OF EXPERIMENTAL BIOLOGY] (1994 Jun) 27 (2) 183-91

Journal code: 0413570 ISSN: 0001-5324

124 ANSWER 70 OF 184 MEDLINE

11 Altered ion channel conductance and ionic selectivity induced by large imposed membrane potential pulse

SO BIOPHYSICAL JOURNAL (1994 Aug) 67 (2) 603-12

Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 71 OF 184 MEDLINE

11 Quantitative study of molecular transport due to electroporation uptake

SO BIOPHYSICAL JOURNAL (1994 May) 66 (5) 1522-30

Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 72 OF 184 MEDLINE

11 Detoxication of base propenals and other alpha,beta-unsaturated aldehyde

SO PRODUCTS OF RADICAL REACTIONS AND LIPID PEROXIDATION BY HUMAN GLUTATHIONE TRANSFERASES

SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA (1994 Feb 15) 91 (4) 1480-4

Journal code: 7505876 ISSN: 0027-8424

124 ANSWER 73 OF 184 MEDLINE

11 Transfection of cultured cells of the cotton boll weevil, *Anthonomus grandis*, with a heat-shock-promoter-chloramphenicol-acetyltransferase construct

SO INSECT MOLECULAR BIOLOGY (1992) 1 (2) 81-8

Journal code: 9303570 ISSN: 0962-1075

124 ANSWER 74 OF 184 MEDLINE

11 Asymmetric black membranes formed by one monolayer of bipolar lipids at the air-water interface

SO BIOCHEMICAL AND BIOPHYSICAL ACTA (1994 Jan 3) 1189 (1) 96-100

Journal code: 0217513 ISSN: 0006-3002

124 ANSWER 75 OF 184 MEDLINE

11 Electroporation of mammalian skin: a mechanism to enhance transdermal drug delivery

SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA (1993 Nov 15) 90 (22) 10504-8

Journal code: 7505876 ISSN: 0027-8424

124 ANSWER 76 OF 184 MEDLINE

11 A quantitative study of electroporation showing a plateau in net molecular transport

SO BIOPHYSICAL JOURNAL (1993 Jul) 65 (1) 414-22

Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 77 OF 184 MEDLINE

11 Induced endocytosis in human fibroblasts by electrical fields

SO EXPERIMENTAL CELL RESEARCH (1993 Sep) 208 (1) 232-40

Journal code: 0373226 ISSN: 0014-4827

124 ANSWER 78 OF 184 MEDLINE

11 Optimization of methods for transfecting *Spiroplasma citri* strain R8A2 HP

SO PLASMID (1993 May) 29 (3) 197-205

Journal code: 7802221 ISSN: 0147-619X

124 ANSWER 79 OF 184 MEDLINE

11 Novel in vitro gene transfer method for study of local modulators in vascular smooth muscle cells

SO HYPERTENSION (1993 Jun) 21 (6 Pt 2) 894-9

124 ANSWER 80 OF 184 MEDLINE

11. Comparison of **liposome** fusion and **electroporation** for the intracellular delivery of impermeant molecules to adherent cells.

SO JOURNAL OF PHARMACOLOGICAL AND TOXICOLOGICAL METHODS, (1997 Feb) 29 (1) 29-35.

Journal code: 9206091, ISSN: 1056-8719.

124 ANSWER 81 OF 184 MEDLINE

11. **Electroporation** of commercial **liposomes** efficiently deliver soluble protein into the MHC class I presentation pathway.

Priming in vitro and in vivo for class I-restricted recognition of soluble antigen.

SO JOURNAL OF IMMUNOLOGICAL METHODS, (1993 Mar 15) 160 (1) 49-57.

Journal code: 1305440, ISSN: 0022-1759.

124 ANSWER 82 OF 184 MEDLINE

11. Multidrug resistance: prospects for clinical management.

SO SAASBULLETIN, BIOCHEMISTRY AND BIOTECHNOLOGY, (1992 Jan) 5 48-52. Ref 35.

Journal code: 8917120, ISSN: 1052-6781.

124 ANSWER 83 OF 184 MEDLINE

11. Increased binding of liposomes to cells by electric treatment.

SO BIOCHEMICAL BIOPHYSICAL ACTA, (1991 Nov 18) 1070 (1) 193-7.

Journal code: 0273593, ISSN: 0006-3002.

124 ANSWER 84 OF 184 MEDLINE

11. Influence of phloretin and alcohols on barrier defects in the erythrocyte membrane caused by oxidative injury and electroporation.

SO BIOCHEMICAL BIOPHYSICAL ACTA, (1991 Aug 26) 1067 (2) 111-22.

Journal code: 0273593, ISSN: 0006-3002.

124 ANSWER 85 OF 184 MEDLINE

11. **Lipid** peroxidation in **electroporated** hepatocytes

occurs much more readily than does hydroxyl-radical formation.

SO BIOCHEMICAL JOURNAL, (1991 Aug 1) 277 (Pt 3) 767-71.

Journal code: 29847269, ISSN: 0264-6021.

124 ANSWER 86 OF 184 MEDLINE

11. Liposome mediated in vitro transfection of pancreatic islet cells.

SO BIOCHEMICAL BIOPHYSICAL ACTA, (1990) 49 (12) 1157-64.

Journal code: 8304435, ISSN: 0222-766X.

124 ANSWER 87 OF 184 MEDLINE

11. Gene transfer methods for plants and cell cultures.

SO CIBA FOUNDATION SYMPOSIUM, (1990) 154 198-208; discussion 208-12. Ref 75.

Journal code: 0356636, ISSN: 0300-5208.

124 ANSWER 88 OF 184 MEDLINE

11. Kaophilic properties of Semliki Forest virus nucleocapsid protein.

SO JOURNAL OF VIROLOGY, (1990 Oct) 64 (10) 5123-31.

Journal code: 013724, ISSN: 0022-538X.

124 ANSWER 89 OF 184 MEDLINE

11. Coexpression of the platelet-derived growth factor (PDGF) B chain and the

PDGF beta receptor in isolated pancreatic islet cells stimulates DNA synthesis.

SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1990 Aug) 87 (15) 5807-11.

Journal code: 7505876, ISSN: 0027-4842.

doi:10.4060/59

124 ANSWER 40 OF 184 MEDLINE

11. In vivo gene transfer methods into bladder without viral vectors.

SO HENYOIKAKIYO, ACETABROLOGIA JAPONICA, (1997 Nov) 43 (11) 873-7.

Journal code: 0421145, ISSN: 0013-1994.

124 ANSWER 41 OF 184 MEDLINE

11. Arabin V and vesicle membrane electroporation.

SO EUROPEAN BIOPHYSICAL JOURNAL, (1997) 26 (4) 307-18.

Journal code: 8409413, ISSN: 0177-7571.

124 ANSWER 42 OF 184 MEDLINE

11. Sphingosine-mediated **electroporative** DNA transfer through lipid bilayers.

SO LIPID LETTERS, (1997 Sep 22) 415 (1) 81-6.

Journal code: 015157, ISSN: 0014-4793.

124 ANSWER 43 OF 184 MEDLINE

11. Potent and selective gene inhibition using antisense oligodeoxynucleotides.

SO MOLECULAR AND CELLULAR BIOCHEMISTRY, (1997 Jul) 172 (1-2) 213-25.

Journal code: 0164456, ISSN: 0190-8177.

124 ANSWER 44 OF 184 MEDLINE

11. [Nonviral methods of gene transfer in gene therapy].
Necrosis by method perenosa genov y genot terapii.

SO VOPEKSY MEDITSINSKOI KHIMII, (1997 Jan-Feb) 43 (1) 3-12. Ref 190.

Journal code: 0416601, ISSN: 0042-8809.

124 ANSWER 45 OF 184 MEDLINE

11. Heparin alters transdermal transport associated with electroporation.

SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1997 May 29) 234 (3) 637-40.

Journal code: 0372516, ISSN: 0006-291X.

124 ANSWER 46 OF 184 MEDLINE

11. Optimization of transfection of human endothelial cells.

SO ENDOTHELIAL, (1997) 5 (1) 21-35.

Journal code: 9412590, ISSN: 1062-3329.

124 ANSWER 47 OF 184 MEDLINE

11. Permeabilization of mammalian cells to proteins: poliovirus 2A(pro) as a

probe to analyze entry of proteins into cells.

SO EXPERIMENTAL CELL RESEARCH, (1997 Apr 10) 232 (1) 186-90.

Journal code: 0373226, ISSN: 0014-4827.

124 ANSWER 48 OF 184 MEDLINE

11. Dynamically stabilized pores in bilayer membranes.

SO BIOPHYSICAL JOURNAL, (1997 May) 72 (5) 2211-6.

Journal code: 0370626, ISSN: 0006-3495.

124 ANSWER 49 OF 184 MEDLINE

11. Transcriptional modulation of viral reporter gene constructs showing

induction of the cellular stress response.

SO NUCLEIC ACIDS RESEARCH, (1997 Mar 1) 25 (5) 1082-4.

Journal code: 0411011, ISSN: 0365-1048.

124 ANSWER 50 OF 184 MEDLINE

11. Gene transfection of mouse primordial germ cells in vitro and analysis of

their survival and growth control.

SO EXPERIMENTAL CELL RESEARCH, (1997 Jan 10) 230 (1) 76-85.

Journal code: 0373226, ISSN: 0014-4827.

124 ANSWER 51 OF 184 — MEDLINE
H. A comparison of gene transfer methods in human dendritic cells
SO. CANCER GENE THERAPY, (1997 Jan-Feb) 4 (1) 17-25
Journal code: 94-2230, ISSN: 0929-1903

124 ANSWER 52 OF 184 — MEDLINE
H. Low sample volume cause: dilution in human rhadon cytosolic cell
line ED subjected to electroporation
SO. CELLULAR AND MOLECULAR BIOLOGY, (1996 Dec) 42 (8) 1219-27
Journal code: 9216759, ISSN: 0147-5680

124 ANSWER 53 OF 184 — MEDLINE
H. Polyoxamer 188 decreases susceptibility of artificial lipid membranes to **electroporation**
SO. BIOPHYSICAL JOURNAL, (1996 Dec) 71 (6) 3229-41
Journal code: 0370626, ISSN: 0006-3495

124 ANSWER 54 OF 184 — MEDLINE
H. The in vitro biosynthesis of the copolysaccharide produced by Rhizobium leguminosarum by, strain NA 30.
SO. CELLULAR AND MOLECULAR BIOLOGY, (1996 Jul) 42 (5) 737-58
Journal code: 9216789, ISSN: 0145-5680

124 ANSWER 55 OF 184 — MEDLINE
H. Adenovirus-assisted lipofection: efficient in vitro gene transfer of luciferase and cytosine deaminase to human smooth muscle cells.
SO. ATHEROSCLEROSIS, (1996 Jul) 124 (1) 49-60
Journal code: 0242543, ISSN: 0021-9150

124 ANSWER 56 OF 184 — MEDLINE
H. Transdermal delivery of tetracycline by electroporation. I. Influence of electrical factors.
SO. PHARMACEUTICAL RESEARCH, (1996 Apr) 13 (4) 559-65
Journal code: 8406521, ISSN: 0724-8741

124 ANSWER 57 OF 184 — MEDLINE
H. Contrasting effects of phorbol ester and agonist-mediated activation of protein kinase C on phosphoinositide and Ca²⁺ signalling in a human neuroblastoma
SO. BIOCHEMICAL JOURNAL, (1996 Jun) 316 (Pt 3) 905-12
Journal code: 2984726R, ISSN: 0264-6021

124 ANSWER 58 OF 184 — MEDLINE
H. Electro-optics of membrane **electroporation** in diphenylhexatriene-doped lipid bilayer vesicles.
SO. BIOPHYSICAL CHEMISTRY, (1996 Jan) 58 (1-2) 109-16
Journal code: 0403171, ISSN: 0301-4622

124 ANSWER 59 OF 184 — MEDLINE
H. Delivery of protein antigen to the major histocompatibility complex class II-restricted antigen presentation pathway.
SO. JOURNAL OF IMMUNOLOGY, (1995) 155 (2) 91-100. Ref 177
Journal code: 9312476, ISSN: 1061-186X

(d) 150-39

124 ANSWER 20 OF 184 — MEDLINE
H. Protrusive growth from giant liposomes driven by actin polymerization.
SO. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1999 Mar) 96 (5) 2048-53
Journal code: 7505876, ISSN: 0027-8424

124 ANSWER 21 OF 184 — MEDLINE

H. Failure to achieve gene conversion with chimeric circular oligonucleotides: potentially misleading PCR artifacts observed
SO. ANTISENSE AND NUCLEIC ACID DRUG DELIVERY, (1998 Dec) 8 (6) 531-6
Journal code: 9606142, ISSN: 1087-2906

124 ANSWER 22 OF 184 — MEDLINE
H. Improved transfection efficiency of chicken gonadal primordial germ cells for the production of transgenic poultry.
SO. TRANSGENIC RESEARCH, (1998 Feb) 7 (4) 247-52
Journal code: 9209120, ISSN: 0962-8819

124 ANSWER 23 OF 184 — MEDLINE
H. Kinetics of ultraweak light emission from human erythroleukemia K562 cells upon electroporation.
SO. BIOCHEMICAL BIOPHYSICAL ACTA, (1998 Nov) 111 (1) 41-50
Journal code: 0217513, ISSN: 0006-3062

124 ANSWER 24 OF 184 — MEDLINE
H. Up-regulation of the expression of major histocompatibility complex class I antigens by plasmid DNA transfection in non-hematopoietic cells.
SO. FEBS LETTERS, (1998 Sep) 25 (4) 436-40
Journal code: 0155157, ISSN: 0014-5793

124 ANSWER 25 OF 184 — MEDLINE
H. Proteoglycans mediate cationic liposome-DNA complex-based gene delivery in vitro and in vivo.
SO. JOURNAL OF BIOLOGICAL CHEMISTRY, (1998 Oct) 273 (40) 26164-70
Journal code: 2985121R, ISSN: 0021-9258

124 ANSWER 26 OF 184 — MEDLINE
H. Electroporation of human stratum corneum: fine structure by high voltage pulses: a freeze-fracture electron microscopy and differential thermal analysis study.
SO. JOURNAL OF INVESTIGATIVE DERMATOLOGY, SYMPOSIUM PROCEEDINGS, (1998 Aug) 3 (2) 152-8
Journal code: 9609059, ISSN: 1087-0024

124 ANSWER 27 OF 184 — MEDLINE
H. Theory of skin electroporation: implications of straight-through aqueous pathway segments that connect adjacent corneocytes.
SO. JOURNAL OF INVESTIGATIVE DERMATOLOGY, SYMPOSIUM PROCEEDINGS, (1998 Aug) 3 (2) 143-7
Journal code: 9609059, ISSN: 1087-0024

124 ANSWER 28 OF 184 — MEDLINE
H. The reduction in **electroporation** voltages by the addition of a surfactant to planar lipid bilayers.
SO. BIOPHYSICAL JOURNAL, (1998 Aug) 75 (2) 880-8
Journal code: 0370626, ISSN: 0006-3495

124 ANSWER 29 OF 184 — MEDLINE
H. In vivo gene transfer methods in the bladder without viral vectors
SO. BRITISH JOURNAL OF UROLOGY, (1998 Jun) 81 (6) 870-4
Journal code: 15740090R, ISSN: 0007-1331

124 ANSWER 30 OF 184 — MEDLINE
H. Electroporation and shock-induced transmembrane potential in a cardiac fiber during defibrillation strength shocks.
SO. ANNALS OF BIOMEDICAL ENGINEERING, (1998 Jul-Aug) 26 (4) 584-96
Journal code: 0361512, ISSN: 0090-6964

124 ANSWER 31 OF 184 MEDLINE

11 Spatial dynamics of GFP-tagged proteins investigated by local fluorescence enhancement

SO NATURE BIOTECHNOLOGY, (1999 Oct) 14 (10) 1252-6
Journal code: 9604648 ISSN: 1087-0156

124 ANSWER 32 OF 184 MEDLINE

11 A novel method for DIME-dextran mediated transfection of adherent primary cultured human macrophages

SO JOURNAL OF IMMUNOLOGICAL METHODS, (1998 Feb) 211 (1-2) 79-86
Journal code: 1305440 ISSN: 0022-1759

124 ANSWER 33 OF 184 MEDLINE

11 Electrical properties of skin at moderate voltages: contribution of appendageal macro-pores

SO BIOPHYSICAL JOURNAL, (1998 Feb) 74 (2 Pt 1) 843-56
Journal code: 0370626 ISSN: 0006-3495

124 ANSWER 34 OF 184 MEDLINE

11 Chronopotentiometric studies of **electroporation** of bilayer lipid membranes

SO BIOCHEMICAL BIOPHYSICAL ACTA, (1998 Mar) 213 69 (2) 204-12
Journal code: 0217517 ISSN: 0006-3002

124 ANSWER 35 OF 184 MEDLINE

11 Electro-encapsulating drugs within blood platelets: local delivery to injured arteries during angioplasty

SO SEMINARS IN INTERVENTIONAL CARDIOLOGY, (1996 Mar) 1 (1) 91-102 Ref: 27
Journal code: 9606070 ISSN: 1084-2764

124 ANSWER 36 OF 184 MEDLINE

11 Transient transfection of oligodendrocyte progenitors by electroporation

SO NEUROCHEMICAL RESEARCH, (1998 Mar) 23 (3) 421-6
Journal code: 7613461 ISSN: 0364-3190

124 ANSWER 37 OF 184 MEDLINE

11 Changes in the electrical properties of the skin outermost layer during pulse electro-treatment

SO MEMBRANE AND CELL BIOLOGY, (1997) 11 (3) 367-80
Journal code: 9517472 ISSN: 1023-6597

124 ANSWER 38 OF 184 MEDLINE

11 Reversible skin permeabilization for transdermal delivery of macromolecules

SO CRITICAL REVIEWS IN THERAPEUTIC DRUG CARRIER SYSTEMS, (1997) 14 (4) 455-83 Ref: 206
Journal code: 8511159 ISSN: 0743-4863

124 ANSWER 39 OF 184 MEDLINE

11 Mechanism of electroporative dye uptake by mouse B cells

SO BIOPHYSICAL JOURNAL, (1998 Jan) 74 (1) 98-108
Journal code: 0370626 ISSN: 0006-3495

discuss 149

124 ANSWER 1 OF 184 MEDLINE

11 [Transdermal administration of drugs by electroporation]

Administration transdermique de medicaments par electroporation
SO BULLETIN ET MEMOIRES DE L'ACADEMIE ROYALE DE MEDICINE DE BELGIQUE, (1999) 154 (6 Pt 2) 327-33
Journal code: 7608462 ISSN: 0377-8231

124 ANSWER 2 OF 184 MEDLINE

11 Pharmaceutical therapies for sealing of permeabilized cell

membranes in

electrical injuries

SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1999 Oct) 888 266-77
Journal code: 7506858 ISSN: 0077-8923

124 ANSWER 3 OF 184 MEDLINE

11 Changes in **electroporation** three-molds of lipid membranes by surfactants and peptides

SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1999 Oct) 888 249-65
Journal code: 7506858 ISSN: 0077-8923

124 ANSWER 4 OF 184 MEDLINE

11 Biological effects of electric shock and heat denaturation and oxidation

of molecules, membranes, and cellular functions
SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1999 Oct) 888 211-22
Journal code: 7506858 ISSN: 0077-8923

124 ANSWER 5 OF 184 MEDLINE

11 Dynamics of membrane sealing in transient electroporation of skeletal muscle membranes

SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1999 Oct) 888 195-210
Journal code: 7506858 ISSN: 0077-8923

124 ANSWER 6 OF 184 MEDLINE

11 Membrane electroporation and electromechanical deformation of vesicles and cells

SO FARADAY DISCUSSIONS, (1998) (111) 111-25; discussion 137-57
Journal code: 9212301 ISSN: 1359-6640

124 ANSWER 7 OF 184 MEDLINE

11 Efficient and reliable transfection of mouse erythroleukemia cells using cationic lipids

SO BLOOD CELLS, MOLECULES, AND DISEASES, (1999 Oct-Dec) 25 (5-6) 299-304
Journal code: 9509932 ISSN: 1079-9796

124 ANSWER 8 OF 184 MEDLINE

11 Chemical and physical in vitro alterations of the erythrocyte membrane: a

model for its pathophysiological states?
SO NOVARTIS FOUNDATION SYMPOSIUM, (1999) 226 20-34; discussion 34-6 Ref: 70
Journal code: 9807767

124 ANSWER 9 OF 184 MEDLINE

11 Apoptosis induced by DNA uptake limits transfection efficiency

SO EXPERIMENTAL CELL RESEARCH, (1999 Dec) 151 253 (2) 541-50
Journal code: 0373226 ISSN: 0014-4827

124 ANSWER 10 OF 184 MEDLINE

11 Molecular electroporation: a unifying concept for the description of membrane pore formation by antibacterial peptides, exemplified with NALysm

SO TIBS LETTERS, (1999 Nov) 26 (1-2) 155-8
Journal code: 0155157 ISSN: 0014-5793

124 ANSWER 11 OF 184 MEDLINE

11 Protective role for proteoglycans against cationic lipid cytotoxicity allowing optimal transfection efficiency in vitro

SO BIOCHEMICAL JOURNAL, (1999 Sep) 342 (Pt 2) 281-6
Journal code: 2984726R ISSN: 0264-6021

124 ANSWER 12 OF 184 MEDLINE

11 Expression and functional characterization of the cardiac muscle

ryanodine receptor/Ca²⁺ release channel in Chinese hamster ovary cells
 SO: BIOPHYSICAL JOURNAL, (1999 Aug) 77 (2) 808-16
 Journal code: 0370626, ISSN: 0006-3495

124 ANSWER 13 OF 184 MEDLINE
 II: Electroporation-mediated topical delivery of vitamin C for cosmetic applications
 SO: BIOELECTROCHEMISTRY AND BIOENERGETICS, (1999 May) 48 (2) 457-61
 Journal code: 9388877, ISSN: 0302-4598

124 ANSWER 14 OF 184 MEDLINE
 II: The effects of gramicidin on **electroporation** of lipid bilayers
 SO: BIOPHYSICAL JOURNAL, (1999 Jun) 76 (6) 3150-7
 Journal code: 0370626, ISSN: 0006-3495

124 ANSWER 15 OF 184 MEDLINE
 II: Electric field-induced transient birefringence and light scattering of synthetic liposomes
 SO: BIOCHEMICAL BIOPHYSICAL ACTA, (1999 May) 12 (14) 2824-32
 Journal code: 0217513, ISSN: 0006-3002

124 ANSWER 16 OF 184 MEDLINE
 II: Time-dependent ultrastructural changes to porcine stratum corneum following an electric pulse
 SO: BIOPHYSICAL JOURNAL, (1999 May) 76 (5) 2824-32
 Journal code: 0370626, ISSN: 0006-3495

124 ANSWER 17 OF 184 MEDLINE
 II: Kinetics of sealing for transient electropores in isolated mammalian skeletal muscle cells
 SO: BIOELECTROCHEMISTRY, (1999) 20 (3) 194-201
 Journal code: 8008281, ISSN: 0197-8462

124 ANSWER 18 OF 184 MEDLINE
 II: Transfection of myelomonocytic cell lines: cellular response to a lipid-based reagent and **electroporation**
 SO: ANALYTICAL BIOCHEMISTRY, (1999 Apr) 10 (1) 219-21
 Journal code: 0370535, ISSN: 0003-2697

124 ANSWER 19 OF 184 MEDLINE
 II: Chemical transformations in individual ultrasmall biomimetic containers
 SO: SCIENCE, (1999 Mar) 19 (287) 409-1892-5
 Journal code: 0040511, ISSN: 0036-8075

— d d b i b a b 178 176,157,143,146,133,93,87,83,77,22

124 ANSWER 178 OF 184 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 19991546085 CAPLUS
 DOCUMENT NUMBER: 113146085
 TITLE: Methods for introducing DNA into mammalian cells
 AUTHOR(S): Keown, Wayne A.; Campbell, Colin R.; Kuchelapati, Raju S.

CORPORATE SOURCE: Coll. Med., Univ. Illinois, Chicago, Ill., 60602, USA
 SOURCE: Methods Enzymol. (1999), 185(Gene Expression Technology), 527-57
 CODEN: MEZAUJ, ISSN: 0076-6879

DOCUMENT TYPE: Journal, General Review
 LANGUAGE: English
 AB: A review with 48 refs. DNA transfer methods discussed include calcium phosphate copptn., DEAE-Dextran-mediated transfection, electric field-mediated transfection (**electroporation**), polybrene-mediated transfection, **lipid**-mediated transfection, lipofection, red blood cell-mediated transfection, DNA microinjection, the laser method, and microprojectile-mediated gene transfer.

124 ANSWER 176 OF 184 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 19991225107 CAPLUS
 DOCUMENT NUMBER: 114225107

TITLE: **Electroporation of lipid vesicles** by inner electric fields
 AUTHOR(S): Chernadzhiev, Yur. A.; Pastushenko, A. I.
 CORPORATE SOURCE: AN. Frankin Inst. Electrochem., Moscow, USSR
 SOURCE: Charge Field Eff. Biosyst. 2, [Proc. Int. Symp.] (1989), 133-9. Editor(s): Allen, Milton Joel, Cleary, Stephen L., Hawbridge, Fred M. Plenum, New York, N. Y.
 CODEN: SGAZAI

DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB: **Electroporation of lipid** membranes by outer electric field has been studied in detail in plane bilayers bordering on micelles. Vesicle systems require other methods of anal., since they lack the tension-providing micelles. Of significance in this case is also the drop of the elec. potential, caused by the increase in the pore size, esp. in studies of the breakdown by the membrane potential. This paper discusses these problems.

124 ANSWER 157 OF 184 CAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1995849424 CAPLUS
 DOCUMENT NUMBER: 123250642
 TITLE: Apparatus and method for efficient incorporation of molecules into cells

INVENTOR(S): Korenstein, Rafi; Rosenberg, Yosef; Zan-Bar, Isaac
 PATENT ASSIGNMENT(S): Ramot-University Authority for Applied Research and Industrial Development Ltd., Israel
 SOURCE: PCT Int. Appl., 44 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 95/02211	A1	19950831	WO 1995/US2309	19950224
W:	AM, AU, BB, BG, BR, BY, CA, CN, CZ, DE, FI, GL, HU, JP, KG, KP,			
	KR, KZ, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL,			
	RO, RU, SD,			
	SI, SK, TJ, TT, UA, UZ, VN			
RW:	KE, MW, SD, SZ, UG, AE, BE, CH, DL, DE, ES, FR, GB,			
	GR, IL, IT,			
	LU, MC, NL, PT, SI, BE, BJ, CT, CG, CL, CM, GA, GN, ML,			
	MR, NI,			
	SN, TD, TG			
AP 95/19307	A1	19950911	AP 1995-19307	19950224
EP 750663	A1	19970102	EP 1995-011912	19950224
	R, DE, ES, FR, GB, IT			
PRIORITY APPLICATION:			IT 1994-108775	19940225
			WO 1995-US2309	19950224

AB: A method and app. for incorporating macromols. into membrane vesicles. Cells or tissue by electroporation is presented. The method involves the steps of: (1) applying a train of low unipolar or alternating voltage pulses to the macromols. and cells; (2) increasing the concn. of the macromols. at the surface of the cells; and (3) allowing the macromols. to penetrate into the cytosol of the cells through the destabilized cell membrane. The app. includes a support plate having apertures for allowing electrodes to pass through it. Support tubes located within the

apertures surround the electrodes. An elec. current-supplying mechanism connected to the electrode supplies sufficient elec. current to a cell for facilitating the introduction of macromols. into the cell.

I24 ANSWER 143 OF 184 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:19956 CAPLUS
TITLE: Detection of **electroporation** of

liposomes by means of a fast electron transfer reaction

AUTHOR(S): Correa, N.; Mariano, Schell, J. Z. A.
CORPORATE SOURCE: Center Colloidal and Interfacial Dynamics, University of Texas, Arlington, TX, 76019-0065, USA
SOURCE: Book of Abstracts, 215th ACS National Meeting, Dallas, March 29-April 2 (1998), C041-168, American Chemical Society, Washington, D.C.
CODEN: 65Q1AA

DOCUMENT TYPE: Conference Meeting Abstract
LANGUAGE: English

AB: **Electroporation** is a reversible transient pore formation in surfactant bilayers such as cell membranes, vesicles or **liposomes**, induced by a high-voltage elec. pulse applied to the suspension. The applied field elongates the time av. spherical cells and reorients the induced dipoles parallel to E. The evolution of the structural anisotropy can be monitored through the birefringence of the system. In addition, above threshold values of the field strength and pulse length, pore formation may occur in the polar regions of the ellipsoidal shells. To detect if and when pore formation occurs in the course of events, we used the fast electron transfer reaction $\text{Ir(IV)} + \text{Fe(II)} \rightarrow \text{Ir(III)} + \text{Fe(III)}$ as a probe - by originally entrapping Fe(II) inside and placing Ir(IV) outside the liposomes. The reaction can only occur when pores are formed.

I24 ANSWER 146 OF 184 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:329679 CAPLUS
DOCUMENT NUMBER: 129:118293
TITLE: Improving the effectiveness of non-viral gene transfer methods

AUTHOR(S): Hu, Sei Wen; Li, Tim Hong; Ross, Patrick; Stoicheva, Natalya; Zhao, Yali
CORPORATE SOURCE: Membrane Biophysics Laboratory, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA
SOURCE: Cellular & Molecular Biology Letters (1997), 2(Suppl.)

1, Biophysics of Membrane Transport, Pt. 1, 97-110
CODEN: CMBLEF; ISSN: 1425-8153
PUBLISHER: University of Wroclaw, Institute of Biochemistry, Dep. of Genetic Biochemistry

DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB: A review, with 15 refs., and discussion on the use of cationic **lipids** and **electroporation** in non-viral gene transfer methods for the purpose of improving gene delivery.

I24 ANSWER 132 OF 184 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:144726 CAPLUS
DOCUMENT NUMBER: 130:334880
TITLE: Optimization of Electroporation for Biochemical Experiments in Live Cells

AUTHOR(S): Meldrum, Rosalind A.; Bowi, Michael; Ong, Swee Bee;

Richardson, Simon
CORPORATE SOURCE: School of Biochemistry, University of Birmingham, Birmingham, B15 2TT, UK

SOURCE: Biochemical and Biophysical Research Communications

(1999), 256(1), 235-239
CODEN: BBRCAG; ISSN: 0006-291X

PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB: To introduce into cells small mols., which do not permeate the cell membrane naturally, electroporation is the fastest and most efficient technique. Although it is not completely benign, the speed at which a full population of cells can be permeated gives it a strong advantage over

all other cell permeation techniques. Here we describe the potential damaging effects of electroporation and how to derive conditions which avoid these and assure its use for biochem. expts. in live cells. (c)

1999 Academic Press.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

REFORMAT

I24 ANSWER 93 OF 184 MEDLINE
ACCESSION NUMBER: 89042117 MEDLINE
DOCUMENT NUMBER: 89042117 PubMed ID: 3186704

TITLE: Gene transfer from targeted **liposomes** to specific lymphoid cells by **electroporation**.

AUTHOR: Machy, P.; Lewis, I.; McMillan, L.; Jonak, Z. I.
CORPORATE SOURCE: Department of Cell Biology, Smith Kline & French Laboratories, King of Prussia, PA 19406-2799

SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1988 Nov) 85 (21) 8027-31

Journal code: 7505876, ISSN: 0027-8424.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198812
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19881209

AB: Large unilamellar **liposomes**, coated with protein A and encapsulating the gene that confers resistance to mycophenolic acid, were

used as a model system to demonstrate gene transfer into specific lymphoid cells. Protein A, which selectively recognizes mouse IgG2a

antibodies, was coupled to **liposomes** to target them specifically to defined cell types coated with IgG2a antibody. Protein A-coated **liposomes** bound human B lymphoblastoid cells preincubated with a mouse

IgG2a anti-HL A monoclonal antibody but failed to adhere to cells challenged with

an irrelevant (anti-H-2) antibody of the same isotype or to cells incubated in the absence of antibody. Transfection of target cells bound

to protein A-coated **liposomes** was achieved by **electroporation**. This step was essential since only **electroporated** cells survived in a selective medium containing mycophenolic acid. Transfection efficiency with **electroporation** and targeted **liposomes** was as efficient as conventional procedures that used unencapsulated plasmids free in solution but, in the latter case, cell selectivity is not possible. This technique provides a methodology for introducing defined biological macromolecules into specific cell types.

I24 ANSWER 37 OF 154 MEDLINE
ACCESSION NUMBER: 91199726 MEDLINE
DOCUMENT NUMBER: 91199726 PubMed ID: 2086036
TITLE: Gene transfer methods for plants and cell cultures.
AUTHOR: Potrykus I
CORPORATE SOURCE: Institute for Plant Sciences, Swiss Federal
Institute of

Technology (ETH), ETH-Zentrum, Zurich
SOURCE: CIBA FOUNDATION SYMPOSIUM, (1996) 154
198-208, discussion

2: 8-12. Ref: 33.

Journal code: 0356636 ISSN: 0300-5208.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

(ORIGINAL) (JOURNAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199105

ENTRY DATE: Entered SIN: 19910607

Last Updated on SIN: 19910607

Entered Medline: 19910521

AB Agrobacterium-mediated gene transfer provides a routine and efficient gene transfer system for a variety of plant species. As this biological vector does not, however, function with important plant species, numerous alternative approaches have been studied. Of those, direct gene transfer into protoplasts, microinjection and biolistics have been demonstrated to

be effective. Others, for example, viral vectors, agroinfection, liposome injection and electroporation may have special merits, although transgenic plants have not been produced by these techniques yet.

From methods based on pollen transformation, the pollen tube pathway, pollen maturation, incubation of dry seeds, incubation of tissues,

liposome fusion with tissues, microinjection, laser treatment and electroporation of tissues no proof of integrative transformation is available, so far, and it is difficult to envisage how these approaches will ever produce transgenic cells and plants. We discuss (a) why Agrobacterium does not function with all plants, (b) what merits and disadvantages we see for the effective methods, (c) what possibilities we

foresee for some of the other approaches, and (d) why we do not expect the remaining ones to be successful.

I24 ANSWER 53 OF 184 MEDLINE

ACCESSION NUMBER: 92089132 MEDLINE

DOCUMENT NUMBER: 92089132 PubMed ID: 1661151

TITLE: Increased binding of liposomes to cells by electric treatment.

AUTHOR: Chienmordik F V; Papahadjopoulos D; Tsong T Y
CORPORATE SOURCE: Department of Biochemistry, University of Minnesota, St. Paul

CONTRACT NUMBER: CA 35340 (NCI)
GM 28117 (NIGMS)

SOURCE: BIOCHEMICAL BIOPHYSICAL ACTA, (1991) Nov
18: 1070-11

192-7.

Journal code: 0217513 ISSN: 0006-3002

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199201

ENTRY DATE: Entered SIN: 19920216

Last Updated on SIN: 19920205

Entered Medline: 19920129

AB The influence of electric field treatments on the interaction of large

antimicrobial vesicles (liposomes) with animal cells was monitored by the fluorescence assay based on the use of the liposomes loaded by a dye 1-hydroxypyrene-1,3,6-trisulfonic acid (HPTS). It

was shown that application of a short electric pulse (100 microseconds of 3-4

kV/cm) to the suspension of cells in presence of vesicles resulted in significant (more than 2 times) increase of the fluorescence associated

with cells. The pH-sensitivity of the excitation spectrum of the dye and its interaction with the quencher were used to determine the nature of the

phenomenon as the increase of the liposome binding onto the cell surface but not the consequence of a promotion of liposome uptake into the cells by endocytosis. The higher affinity for the liposome caused by the electric field has a lifetime of several minutes. The possible relation of the effect described to the electroporation of cell membranes and to macroscopic changes in membrane structure is discussed.

I24 ANSWER 77 OF 184 MEDLINE

ACCESSION NUMBER: 93365553 MEDLINE

DOCUMENT NUMBER: 93365553 PubMed ID: 8359218

TITLE: Induced endocytosis in human fibroblasts by electrical fields.

AUTHOR: Glogauer M; Lee W; McAlloch C A

CORPORATE SOURCE: Faculty of Dentistry, University of Toronto, Ontario,

Canada.

SOURCE: EXPERIMENTAL CELL RESEARCH, (1993 Sep)
208 (1): 232-40.

Journal code: 0373226 ISSN: 0014-4827.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199309

ENTRY DATE: Entered SIN: 19931015

Last Updated on SIN: 19931015

Entered Medline: 19930930

AB Electroporation creates transient pores through which exogenous molecules can gain access to the cell cytoplasm. However, the electrical events associated with this phenomenon may perturb membrane-dependent

events such as endocytosis. To measure the effect of electroporation on endocytosis, suspensions of human gingival fibroblasts were subjected to 5-ms electrical discharges, allowed to recover for variable periods of time, incubated with fluorescent probes,

and then analyzed by flow cytometry. Incubation of electroporated fibroblasts with FITC-conjugated bovine serum albumin (BSA) to label

monies on cell membranes nonspecifically demonstrated a time-dependent

increase of internalized probe for up to 90 min after

electroporation. Pretreatment incubation of cells with cytochalasin D abrogated the increased internalization of FITC-BSA due to

electroporation. Compared to controls, fluorescence signals due to internalization of surface glycoproteins with FITC-concanavalin A were 43%

higher after electroporation and treatment with endoglycosidase F or H to reduce probe associated with surface membrane. Confocal microscopy confirmed intracellular labeling and reduction of membrane-associated probe by the enzyme. Assessment of non-specific

FITC-Con A labeling of cells by pretreatment with alpha-methyl D-mannoside showed that labeling was largely (92%) specific. Compared to controls,

electroporation induced a 60% increase of internalization of lucifer yellow, a fluid-phase endocytosis marker. Dual fluorescence

labeling of membrane phospholipids by FITC and TRITC-DEHP demonstrated an increased acidification after **electroporation** that was time dependent, indicating that **electroporation** induced more rapid entry of membrane **lipid** into endosomal compartments. These data demonstrate that the electrical fields used in **electroporation** of fibroblasts cause an actin-dependent increase in the internalization of

all membrane components examined and an increased rate of probe entry in to acidifying compartments.

124 ANSWER 22 OF 134 MEDLINE
ACCESSION NUMBER = 1999076316 MEDLINE
DOCUMENT NUMBER = 99076316 PubMed ID: 9859213
TITLE Improved transfection efficiency of chicken gonadal
primordial germ cells for the production of transgenic
poultry.
AUTHOR Hong Y H, Moon Y K, Jeong D K, Han J Y
CORPORATE SOURCE Department of Animal Science and
Technology, College of
Agriculture and Life Sciences, Seoul National University,
Suwon, Korea.
SOURCE TRANSGENIC RESEARCH, 6:998 Jul 7 (4):247-
52.

Journal code: 9209120, ISSN: 0962-8319
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal Article, JOURNAL ARTICLE
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199901
ENTRY DATE: Entered SIN: 19990202
Last Updated on SIN: 19990202
Entered Medline: 19990119

AB **Electroporation** is a common method of DNA transfection for many types of eukaryotic cells, but has not been attempted in avian primordial germ cells (PGCs). DNA uptake in chicken primordial germ cells (PGCs) was tested using **electroporation** with and without dimethyl sulfoxide (DMSO). Gonadal tissue and chicken embryonic fibroblasts (CEFs) were isolated from 6-day-old embryos (stage 29), transfected with pCMV-beta carrying the bacterial lacZ gene, and cultured for 24 h. Gonadal primordial germ cells (gPGCs) were purified from culture using a Ficol gradient. The addition of DMSO significantly increased the transfection efficiency of gPGCs but had no effect on chicken embryonic fibroblasts.

Electroporation of gPGCs resulted in an 80% transfection efficiency compared with about 17% observed with **liposomes**. Approximately 200 transfected gPGCs were injected into 2.5-day-old (stage 17) recipient embryos and the eggs were incubated for an additional 3.5 days, 7.5 days or to hatching. The exogenous gene was detectable in 100%, 67% and 41% of the 6-day-old (stage 29), 10-day-old (stage 36) recipient embryos and hatched chicks gonads, respectively. PCR analysis of DNA from the hatched chicks showed that exogenous lacZ DNA was detected only in the gonad and not the liver and heart. These results indicated that **electroporation** was a suitable means of transfecting avian gPGCs for the goal of producing transgenic poultry.

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'IS' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid

in at least one of the files. Refer to file specific help messages or the SINGLE file for information on formats available in individual files.

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d h e l d e m u l t i end AT 15:05:39 ON 02 OCT 2002

FILE 'MEDLINE BIOSIS, CAPUS' ENTERED AT 15:05:47 ON
02 OCT 2002

11 482 S MICROCYTE MEDIATED CHROMOSOME
TRANSFER
12 11852 SELECTROPORA?2
13 2 S I 1 AND I 2
14 2 DUP REM I 3 (0 DUPLICATES REMOVED)
15 173 SELECTROTRANSFECT?
16 26 S TRANSFECT AND ELECTRIC?
17 2095 S TRANSFECT? AND PUTS
18 552069 S CHROMOSOME
19 41 S I 7 AND I 8
110 23 DUP REM I 9 (18 DUPLICATES REMOVED)
111 13745 S I 2 OR I 5 OR I 7
112 2 S I 11 AND I 1
113 0 S I 12 NOT I 3
114 775 S I 8 AND I 11
115 831822 S MICELLE OR LIPID OR LIPOSOME
116 13 S I 14 AND I 15
117 9 DUP REM I 16 (4 DUPLICATES REMOVED)
118 825 S I 11(S) I 15
119 11928 S I 2 OR I 5
120 477 S I 15(S) I 19
121 280 DUP REM I 20 (197 DUPLICATES REMOVED)
122 2737 S I ARG1 DNA
123 0 S I 21 AND I 22
124 184 S I 21 NOT PY-1999

is faces or cell sort?

125 23471 FACS OR CELL SORT?

is H and I25

126 2 I 1 AND I 25

is dup rem I26

PROCESSING COMPLETED FOR I26

127 2 DUP REM I26 (0 DUPLICATES REMOVED)

is d t i s o l -2

'SOI-2' IS NOT A VALID FORMAT FOR FILE 'CAPUS'

The following are valid formats:

ABS ----- GI and AB
AFL ----- BIB, AB, IND, FI
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DATE ----- AFL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- AFL, plus Patent FAM, RE
PATS ----- PI, SO
SAM ----- CC, SX, IL, SI, FI
SCAN ----- CC, SX, IL, SI, FI (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY;
e.g., DSCAN or DISPLAY SCAN)
SID ----- BIB, IPC, and NC
TABS ----- ABS, indented, with text labels

FILE ----- FILE, indented with text labels
 BIBB ----- BIBB, indented with text labels
 IMAN ----- MAN, indented with text labels
 ISID ----- SID, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
 OBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citation
 SBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms
 HITIND ----- IC, ICA, ICG, NCI, CC and index field (SI and TI)
 containing hit terms
 HITERN ----- HITERN and its text modification
 HITSTR ----- HITERN, its text modification, its CA index name, and
 its structure diagram
 HITSEQ ----- HITERN, its text modification, its CA index name, its
 structure diagram, plus NFE and SEQ fields
 FHITSTR ----- First HITERN, its text modification, its CA index name,
 and
 its structure diagram
 FHITSEQ ----- First HITERN, its text modification, its CA index name,
 its
 structure diagram, plus NFE and SEQ fields
 KWIC ----- Hit term plus 20 words on either side
 OCC ----- Number of occurrence of hit term and field in which it
 occurs

To display a particular field or fields, enter the display field
 codes. For a list of the display field codes, enter HELP DISPLAYS at
 an arrow prompt (→). Examples of formats include: TL, TLAU,
 BIB,SI;
 TLIND; TLSEQ. You may specify the format fields in any order and the
 information will be displayed in the same order as the format
 specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITERN,
 HITSTR,
 FHITSTR, FHITSEQ, FHITSEQ, KWIC, and OCC) may be used with
 DISPLAY ACC
 to view a specified Accession Number.
 ENTER DISPLAY FORMAT (BIB);end

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127 ANSWER 1 OF 2 CAPUS. COPYRIGHT 2002 ACS
 TL Detection and interpretation of mutations using animal cell hosts to
 express human genes present on a single copy of a human
 chromosome
 SO PC1 Int. Appl., 149 pp.
 CODEN: PIXND2

127 ANSWER 2 OF 2 CAPUS. COPYRIGHT 2002 ACS
 TL Diagnosis, prognosis and treatment of cancer related to the Barx2
 gene
 SO PC1 Int. Appl., 190 pp.
 CODEN: PIXND2

→ d; bib ab 1-2

127 ANSWER 1 OF 2 CAPUS. COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002276207 CAPUS
 DOCUMENT NUMBER: 136289911
 TITLE Detection and interpretation of mutations using
 animal
 cell host, to express human genes present on a single
 copy of a human chromosome
 INVENTOR(S) Beaudet, Arthur, Bodamer, Olaf, Killary, Ann,
 Foxell
 Mercedes
 PATENT ASSIGNMENT Board of Regents, the University of Texas
 System, USA

SOURCE PC1 Int. Appl., 149 pp.
 CODEN: PIXND2
 DOCUMENT TYPE Patent
 LANGUAGE English
 FAMILY ACC. NUM. COUNT 1
 PATENT INFORMATION

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002029407	A2	20020411	WO 2001-48309/68	20011002
WU, AF, AG, AL, AM, AI, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GF, GH, GM, HE, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NO, NZ, PE, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW, GH, GM, KE, LS, MW, MZ, SD, SE, SZ, TZ, UG, ZW, AI, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, HE, IL, LU, MC, NL, PT, SE, TR, BE, RU, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NI, SN, TD, TG				

US 2002137067 A1 20020926 US 2001-969861 20011002
 PRIORITY APPL. INFO: US 2000-237471P P 20001002

AB The present invention relates to a method for detection and
 interpretation
 of loss-of-function or gain-of-function mutations for test genes of
 interest. The genes of interest include those assoc. with inherited
 genetic disorders. The method involves testing for gene function by
 transferring single copies of individual human chromosomes into a
 suitable
 host cell. Human cells are obtained from peripheral blood. Transfer
 is
 preferably by **microcell-mediated chromosome**
transfer. Transfer is screened for anal. of expression of a
 marker gene closely linked to the gene of interest. Guidelines for the
 selection of host cells and marker genes that can be used to detect
 transfer are described. The preferred markers are cell surface
 proteins
 such as ICAM-1 that can be easily assayed or used for fluorescence
 activated **cell sorting**. The method is demonstrated by
 detection of a mutation in the human FcγR receptor gene on
 chromosome 19
 using CHO cells as a host.

127 ANSWER 2 OF 2 CAPUS. COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2000-900847 CAPUS
 DOCUMENT NUMBER: 13469875
 TITLE: Diagnosis, prognosis and treatment of cancer related
 to the Barx2 gene
 INVENTOR(S) Nelken, Barry David; Gabra, Hanri; Sellar, Grant
 Clark;
 Watson, Janet Elizabeth Vivienne; Porteous, David John
 PATENT ASSIGNMENT Imperial Cancer Research Technology
 Limited, U.K. Johns
 Hopkins University
 SOURCE: PC1 Int. Appl., 190 pp.
 CODEN: PIXND2

DOCUMENT TYPE Patent
 LANGUAGE English
 FAMILY ACC. NUM. COUNT 1
 PATENT INFORMATION

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077252	A1	20001221	WO 2000-612328	20000615

W AL, AG, AL, AM, AL, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GI, GL, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LL, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, NZ, PE, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, SM, SN, ST, SV, SZ, TA, TC, TD, TH, TJ, TM, TR, TT, TZ, UA, UG, UZ, VC, VE, VI, VN, YU, ZA, ZW, AM, AZ, BY, EG, KZ, MD, RU, TJ, TM, RW, GH, GM, KE, US, MW, MZ, SD, SE, SZ, TZ, UG, ZW, AL, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IL, IT, MC, NL, PL, SE, SI, BE, BL

CE, CG, CL, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG EP 1183392 A1 20020306 EP 2000-942186 20000615 RE AL, BE, CH, DE, DK, ES, FR, GB, GR, IE, IL, IT, NL, SI, MC, PL, IE, SL, TJ, TV, FI, RO PRIORITY APPN INFO: US 1999-139320P P 19990615 GB 2000-5466 A 20000308 WO 2000-GB2328 W 20000615

AB It has been found that the Barx2 gene is mutated in ovarian cancer. The invention provides methods of diagnosis, prognosis and treatment of cancer related to the Barx2 gene by obtaining a sample contg. nucleic acid from the patient and hybridizing it with a nucleic acid specific to the Barx2 gene, or a mutant allele thereof

REFERENCE COUNT: 9 OTHER ARTS CITED
REFERENCES AVAILABLE FOR THIS RECORD: ALL CITATIONS AVAILABLE IN THE REFORMAT

--s yac2 or mac?
128 1447377 YAC2 OR MAC?

--s artificial chromosome
129 9621 ARTIFICIAL CHROMOSOME

--d his

FILE 'HOME' ENTERED AT 15:05:39 ON 02 OCT 2002

FILE 'MEDLINE, BIOSIS, CAPUS' ENTERED AT 15:05:47 ON 02 OCT 2002

11 482 S MICROCELL MEDIATED CHROMOSOME TRANSFER

12 11852 SELECTROPORAT?

13 2 S L1 AND L2

14 2 D U P L E M 13 (0 DUPLICATES REMOVED)

15 173 S ELECTROTRANSFECT?

16 26 S TRANSFECT AND ELECTRIC?

17 2095 S TRANSFECT? AND PULSE

18 552069 S CHROMOSOME

19 41 S L7 AND L8

110 2 D U P L E M 19 (18 DUPLICATES REMOVED)

111 13745 S L2 OR L5 OR L7

112 2 S L11 AND L11

113 6 S L12 NOT L3

114 775 S L8 AND L11

115 831422 S MICROCELL OR LIPID OR LIPOSOME

116 13 S L14 AND L15

117 9 D U P L E M 16 (4 DUPLICATES REMOVED)

118 825 S L16 S L15

119 11928 S L2 OR L5

120 477 S L17 S L19

121 280 D U P L E M 129 (197 DUPLICATES REMOVED)

122 2737 S L A P G L D3A

123 6 S L21 AND L22

124 184 S L21 NO L PY 1999

125 23471 S L A C S OR C L E S O R L?

126 2 S L11 AND L25

127 2 D U P L E M 126 (0 DUPLICATES REMOVED)

128 1447377 YAC2 OR MAC?

129 9621 S ARTIFICIAL CHROMOSOME

--s 125 and 129

130 17 L25 AND L29

--d up to m 130

PROCESSING COMPLETED FOR L30

131 12 D U P L E M 130 (5 DUPLICATES REMOVED)

--d use 1-12

131 ANSWER 1 OF 12 CAPUS COPYRIGHT 2002 ACS

11 Collections of transgenic animal lines in which a subset of cells characterized by expression of an endogenous "characterizing" gene and

uses

SO PCT Int. Appl. 170 pp.

CODEN: PIXND2

131 ANSWER 2 OF 12 CAPUS COPYRIGHT 2002 ACS

11 Genetically engineered reporter system expressing fluorescent protein for rapid detection of cell surface receptor-ligand binding and uses in high-throughput screening assays

SO PCT Int. Appl. 66 pp.

CODEN: PIXND2

131 ANSWER 3 OF 12 MEDLINE

11 Development of a transgenic green fluorescent protein lineage marker for steroidogenic factor 1.

SO MOLECULAR ENDOCRINOLOGY, (2002 Oct) 16 (10) 2360-70. Journal code: 8801431, ISSN: 0888-8809.

131 ANSWER 4 OF 12 MEDLINE

DUPLICATE 1

11 Retrofitting of a satellite repeat DNA-based murine **artificial chromosome** (ACs) to contain loxP recombination sites.

SO GENETHE RAPY, (2002 Jun) 9 (11) 719-23.

Journal code: 9421525, ISSN: 0969-7128.

131 ANSWER 5 OF 12 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 Hybridization to high-density filter arrays of a Brugia malayi BAC library

with biotinylated oligonucleotides and PCR products.

SO Biotechniques, (June, 2001) Vol. 30, No. 6, pp. 1216-1224, print. ISSN: 0736-6205.

131 ANSWER 6 OF 12 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 2

11 Membrane cofactor protein (MCP; CD46) expression in transgenic mice.

SO Clinical and Experimental Immunology, (May, 2001) Vol. 124, No. 2, pp.

180-189, print.

ISSN: 0009-9104.

131 ANSWER 7 OF 12 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 A flow cytometry technique for measuring chromosome-mediated gene

transfer.

SO Cytometry, (June 1, 2001) Vol. 44, No. 2, pp. 100-105, print.

ISSN: 0196-4763

131 ANSWER 8 OF 12 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 A human CD34-PAC clone targets an earlier hematopoietic cell than the

endogenous murine CD74 gene in transgenic mice.
 SO: BLOOD, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 821a-
 pm1.
 Meeting Info: 42nd Annual Meeting of the American Society of
 Hematology
 San Francisco, California, USA December 01-05, 2000 American
 Society of
 Hematology
 ISSN: 0960-4971.

131. ANSWER 9 OF 12. MEDLINE
 II. A fast method to diagnose chromosomal and plasmid loss in
 Saccharomyces
 cerevisiae strains.
 SO: YEAST, (1999) July 75 (103): 1909-19.
 Journal code: 8607637. ISSN: 0749-502X.

131. ANSWER 10 OF 12. CAPLUS. COPYRIGHT 2002 ACS
 II. High-throughput screening for novel enzymes by co-encapsulation
 and
 fluorescence activated **cell sorting** in genome
 expression libraries.
 SO: PCT Int. Appl., 95 pp.
 CODEN: PINXD2.

131. ANSWER 11 OF 12. BIOSIS. COPYRIGHT 2002 BIOLOGICAL
 ABSTRACTS INC.
 II. Modification of bacterial **artificial chromosome** clones
 using Cre recombinase: Introduction of selectable markers for
 expression
 in eukaryotic cells.
 SO: Genome Research, (April, 1998) Vol. 8, No. 4, pp. 404-412.
 ISSN: 1088-9051.

131. ANSWER 12 OF 12. CAPLUS. COPYRIGHT 2002 ACS
 II. Human genome analysis using chromosome sorting.
 SO: Tanpakushitsu Kalusan Koso (1993), 38(3), 268-77.
 CODEN: TAKEAI. ISSN: 0039-9450.

Is flow cytometry?
 132. 131727 FLOW CYTOMETRY?

Is this

(JULI THOM) ENTERED AT 15:05:39 ON 02 OCT 2002)

FILE MEDLINE, BIOSIS, CAPLUS ENTERED AT 15:05:47 ON
 02 OCT 2002

11. 482 S MICROCELL-MEDIATED CHROMOSOMAL
 TRANSFER.
 12. 1682 S TITROPORAT?
 13. 2 S T1 AND T2
 14. 2 DUPEM13 (6 DUPLICATES REMOVED)
 15. 173 S ELECTROTRANSFECT?
 16. 26 S TRANSFECT AND ELECTRIC?
 17. 2695 S TRANSFECT? AND PULSE
 18. 552069 S CHROMOSOME
 19. 41 S T7 AND T8
 110. 23 DUPEM19 (8 DUPLICATES REMOVED)
 111. 6745 S T2 OR T5 OR T7
 112. 2 S T11 AND T11
 113. 6 S T12 NOT T3
 114. 775 S T8 AND T11
 115. 841822 S MPELT11 OR LIPID OR LIPOSOME
 116. 1 S T14 AND T15
 117. 9 DUPEM16 (4 DUPLICATES REMOVED)
 118. 825 S T116 S T15
 119. 11928 S T2 OR T5
 120. 477 S T15 S T19
 121. 289 DUPEM120 (19 DUPLICATES REMOVED)
 122. 2737 S LARGE DNA
 123. 6 S T121 AND T22
 124. 184 S T21 NOT PY (1999)

125. 23471 S TACS OR CELL SORT?
 126. 2 S T11 AND T25
 127. 2 DUPEM126 (6 DUPLICATES REMOVED)
 128. 1447377 S VACUOLAR MAC?
 129. 9621 S APERTHICAL CHROMOSOME
 130. 17 S T125 AND T29
 131. 12 DUPEM136 (5 DUPLICATES REMOVED)
 132. 131727 FLOW CYTOMETRY?

Is 129 and 132
 133. 46 T29 AND T32

Is dup rem 133
 PROCLSSING COMPLETED FOR 133
 134. 2 DUPEM133 (17 DUPLICATES REMOVED)

Is 134 not 131
 135. 28 T34 NOT T21

Is this 1-28
 135. ANSWER 1 OF 28. MEDLINE
 II. Rescue of the lethal self(-) phenotype by the human SCT locus.
 SO: BLOOD, (2002 Jun 1) 99 (11): 3931-8.
 Journal code: 7603509. ISSN: 0006-4971

135. ANSWER 2 OF 28. MEDLINE
 II. Differential regulation of the human and murine CD34 genes in
 hematopoietic stem cells.
 SO: PROCEEDINGS OF THE NATIONAL ACADEMY OF
 SCIENCES OF THE UNITED STATES OF
 AMERICA, (2002 Apr 30) 99 (9): 6246-51.
 Journal code: 7505876. ISSN: 0027-8424.

135. ANSWER 3 OF 28. MEDLINE
 II. Expression of a reporter gene after microinjection of mammalian
artificial chromosomes into pronuclei of bovine zygotes.
 SO: MOLECULAR REPRODUCTION AND DEVELOPMENT, (2001
 Dec) 60 (4): 433-8.
 Journal code: 5903333. ISSN: 1040-452X.

135. ANSWER 4 OF 28. MEDLINE
 II. Efficient in-vitro transfer of a 60-Mb mammalian **artificial
 chromosome** into murine and hamster cells using cationic lipids and
 dendrimers.
 SO: CHROMOSOME RESEARCH, (2001) 9 (6): 475-85.
 Journal code: 9313452. ISSN: 0967-3849.

135. ANSWER 5 OF 28. MEDLINE
 II. Specific cytogenetic labeling of bovine spermatozoa bearing X or Y
 chromosomes using fluorescent in situ hybridization (FISH).
 SO: Genet Sel Evol, (2001 Jan-Feb) 33 (1): 89-98.
 Journal code: 9114088. ISSN: 0999-193X.

135. ANSWER 6 OF 28. MEDLINE
 II. 6p abnormalities and TNF-alpha over-expression in retinoblastoma
 cell
 line.
 SO: CANCER GENETICS AND CYTOGENETICS, (2001 Jul 15) 128
 (2): 141-7.
 Journal code: 7909240. ISSN: 0165-4608.

135. ANSWER 7 OF 28. MEDLINE
 II. A **flow cytometry** technique for measuring
 chromosome-mediated gene transfer.
 SO: CYTOMETRY, (2001 Jun 1) 44 (2): 100-5.
 Journal code: 8102328. ISSN: 0169-4763.

135. ANSWER 8 OF 28. MEDLINE
 II. Satellite DNA-based **artificial chromosomes**
 --chromosomal vectors.
 SO: TRENDS IN BIOTECHNOLOGY, (2000 Oct) 18 (10): 402-3.
 Journal code: 8310903. ISSN: 0167-7799

135 ANSWER 9 OF 28 MEDLINE

11 Generation of transgenic mice and germline transmission of a mammalian

artificial chromosome introduced into embryos by pronuclear microinjection.

SO CHROMOSOME RESEARCH (2000) 8 (3) 183-91
Journal code: 931452 ISSN: 0967-5849

135 ANSWER 10 OF 28 MEDLINE

11 Mammalian **artificial chromosome** pilot production facility: large-scale isolation of functional satellite DNA-based **artificial chromosomes**.

SO CYTOMETRY (1999) 10 (1) 125-32
Journal code: 8192328 ISSN: 0096-4763

135 ANSWER 11 OF 28 MEDLINE

11 B cell tumor genes in mice carrying a yeast **artificial chromosome**-based immunoglobulin heavy chain locus is independent of the heavy chain intron enhancer (Hmu).

SO CANCER RESEARCH (1999) 59 (1) 59-61
Journal code: 2984705R ISSN: 0008-5472

135 ANSWER 12 OF 28 MEDLINE

11 A human immunoglobulin lambda locus is similarly well expressed in mice and humans.

SO JOURNAL OF EXPERIMENTAL MEDICINE (1999) May 17
189 (10) 161-20
Journal code: 2985109R ISSN: 0022-1407

135 ANSWER 13 OF 28 MEDLINE

11 Long-term stability of large insert genomic DNA episomal shuttle vectors

in human cells

SO NUCLEIC ACIDS RESEARCH (1999) Apr 1 27 (7) 1674-82
Journal code: 0411011 ISSN: 0360-5310

135 ANSWER 14 OF 28 MEDLINE

11 CD164, a novel sialomucin on CD34⁺ and erythroid subsets, is located on

human chromosome 6q21.

SO BLOOD (1998) Aug 1 92 (3) 849-66
Journal code: 7603509 ISSN: 0006-4971

135 ANSWER 15 OF 28 MEDLINE

11 The Berge Chediak-Higashi syndrome gene encodes a widely expressed

cytosolic protein.

SO JOURNAL OF BIOLOGICAL CHEMISTRY (1997) Nov 21 272 (47) 29790-4
Journal code: 2985121R ISSN: 0021-9258

135 ANSWER 16 OF 28 MEDLINE

11 A yeast **artificial chromosome** (YAC) containing the critical region of the X-linked lymphoproliferative disease (XLP) locus

SO GENOMICS (1997) Jan 1 29 (1) 55-65
Journal code: 8800135 ISSN: 0888-7547

135 ANSWER 17 OF 28 MEDLINE

11 Large DNA fragment sizing by **flow cytometry** application to the characterization of plasmid **artificial chromosome** (PAC) clones

SO NUCLEIC ACIDS RESEARCH (1996) Nov 1 24 (21) 4202-9
Journal code: 0411011 ISSN: 0360-5310

135 ANSWER 18 OF 28 MEDLINE

11 Characterization of a human chromosome 22 enriched bacterial **artificial chromosome** sublibrary

SO GENETIC ANALYSIS (1995) Oct 12 (2) 73-9
Journal code: 950940J

135 ANSWER 19 OF 28 MEDLINE

11 Introduction of YAC containing a putative mammalian replication

origin

into mammalian cells can generate structures that replicate autonomously

SO SOMATIC CELL AND MOLECULAR GENETICS (1993) Mar 19 (2) 171-92
Journal code: 8403568 ISSN: 0740-7750

135 ANSWER 20 OF 28 MEDLINE

11 Low-frequency chimera yeast **artificial chromosome** libraries from flow-sorted human chromosomes 16 and 21

SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA (1997) Feb 1 94 (3) 1063-7
Journal code: 7505876 ISSN: 0027-8424

135 ANSWER 21 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 Human dendritic cells can be effectively transduced by new generation

helical virus-free herpes simplex amplicon vectors.

SO BLOOD (November 16, 2001) Vol. 98, No. 11 Part 1, pp. 423a.
http://www.bloodjournal.org/print.
Meeting Info: 43rd Annual Meeting of the American Society of Hematology,
Part 1, Orlando, Florida, USA December 07-11, 2001
ISSN: 0006-4971

135 ANSWER 22 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 Response from Brown.

SO Trends in Biotechnology (October, 2000) Vol. 18, No. 10, pp. 403.
print
ISSN: 0167-7799

135 ANSWER 23 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 Molecular analysis of chromosome 6p rearrangement in retinoblastoma.

SO Genetics in Medicine (January/February, 2000) Vol. 2, No. 1, pp. 105.
print.
Meeting Info: Annual Clinical Genetics Meeting Palm Springs,
California,
USA March 09-12, 2000 American College of Medical Genetics
ISSN: 1098-3600

135 ANSWER 24 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 Human satellite DNA-based **artificial chromosomes**.

SO European Journal of Human Genetics (June, 2000) Vol. 8, No. Supplement
1, pp. 40. print.
Meeting Info: European Human Genetics Conference 2000
Amsterdam,
Netherlands May 27-February 30, 2000 European Society of Human Genetics
ISSN: 1018-4813

135 ANSWER 25 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 All that FISH can do for you

SO MS (Medicine Sciences) (Nov., 1997) Vol. 13, No. 11, pp. 1294-1295
ISSN: 0767-0974

135 ANSWER 26 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

11 Chromosomal genetics and molecular genetics: A successful hybridation

SO MS (Medicine Sciences) (Nov., 1997) Vol. 13, No. 11, pp. 1237-1238
ISSN: 0767-0974

135 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2002 ACS

11 Characterization and sequence study of the miniature genome in the marine

chordate *Oncopeltus dionica*
SCIENCE (Washington, DC, United States) (2001), 294(5551), 2506
CODEN: SCIEAS, ISSN: 0036-8075

135 ANSWER 28 OF 28 CAPUS COPYRIGHT 2002 ACS
11 Methods and nucleic acid probe compositions for chromosome-specific
staining and their uses, including detection of genetic rearrangement

in chronic myelogenous leukemia

SC: Can. Pat. Appl. 159 pp
CODEN: CPNLTB

01/01/01 25:24:20.19.1130.7

135 ANSWER 25 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL
ABSTRACTS INC.

ACCESSION NUMBER: 99832647 BIOSIS

DOCUMENT NUMBER: PRI V:998000/2647

TITLE: All that FISH can do for you.

AUTHOR(S): Gilgall, Rantz, Simone G., Schrocek, Evelyn;
Lyanage,

Marci; Du Manoir, Stan; Ried, Thomas
CORPORATE SOURCE: (1) 9 rue Basse, 54330 Clerey-Frenon
France

SOURCE: M-S (Medicine Sciences), (Nov., 1997) Vol. 13, No.
11, pp

1294-1298.

ISSN: 0767-0974.

DOCUMENT TYPE: Article

LANGUAGE: French

135 ANSWER 24 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL
ABSTRACTS INC.

ACCESSION NUMBER: 2000369788 BIOSIS

DOCUMENT NUMBER: PRI V200000369788

TITLE: Human satellite DNA-based **artificial**

chromosomes.

AUTHOR(S): Csonka, Erika (1); Cserpan, I. (1); Lodor, K. (1);
Hollo,

G., (1); Katona, R. (1); Kereso, J. (1); Praznovsky, L.
(1); Szakal, B. (1); Telemus, A.; de Jong, G.; Udvardy,
A.; Hadlaczky, Gy. (1)

CORPORATE SOURCE: (1) Institute of Genetics, BRC, Szeged
Hungary

SOURCE: European Journal of Human Genetics, (June, 2000)
Vol. 8

No. Supplement 1, pp. 40, print.

Meeting Info: European Human Genetics Conference 2000
Amsterdam, Netherlands May. 27-February 30, 2000

European

Society of Human Genetics
ISSN: 1018-4813

DOCUMENT TYPE: Conference

LANGUAGE: English

SUMMARY LANGUAGE: English

135 ANSWER 20 OF 25 MEDLINE

ACCESSION NUMBER: 93157343 MEDLINE

DOCUMENT NUMBER: 93157343 PubMed ID: 8410075

TITLE: Low-frequency chimeric yeast **artificial**
chromosome libraries from flow-sorted human
chromosomes 16 and 21.

AUTHOR: McCormick M.K., Campbell E.; Deaven T.; Moyzis R.
CORPORATE SOURCE: Life Sciences Division, University of
California, MS80 Los

Alamos National Laboratory, NM 87544

SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY
OF SCIENCES OF THE
UNITED STATES OF AMERICA, (1993 Feb 1) 90 (3)

1063-7

Journal code: 7505876 ISSN: 0027-8424

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199303

ENTRY DATE: Entered SIN: 19930326

Last Updated on SIN: 19930326

Entered Medline: 19930305

AB: Construction of chromosome-specific yeast **artificial**
chromosome (YAC) libraries from sorted chromosomes was
undertaken

(i) to eliminate drawbacks associated with first-generation total
genomic

YAC libraries, such as the high frequency of chimeric YACs, and (ii)
to

provide an alternative method for generating chromosome-specific
YAC

libraries in addition to isolating such collections from a total genomic
library. Chromosome-specific YAC libraries highly enriched for
human

chromosomes 16 and 21 were constructed. By maximizing the
percentage of

fragments with two ligatable ends and performing yeast
transformations

with less than saturating amounts of DNA in the presence of carrier
DNA,

YAC libraries with a low percentage of chimeric clones were
obtained. The

smaller number of YAC clones in these chromosome-specific
libraries

reduces the effort involved in PCR-based screening and allows
hybridization methods to be a manageable screening approach.

135 ANSWER 19 OF 28 MEDLINE

ACCESSION NUMBER: 93289448 MEDLINE

DOCUMENT NUMBER: 93289448 PubMed ID: 8511674

TITLE: Introduction of YACs containing a putative mammalian
replication origin into mammalian cells can generate
structures that replicate autonomously.

AUTHOR: Nonet G.H.; Wahl G.M.

CORPORATE SOURCE: Gene Expression Laboratory, Salk Institute
for Biological

Studies, La Jolla, California 92037.

CONTRACT NUMBER: GM27754 (NIGMS)

NCICA48405 (NCI)

SOURCE: SOMATIC CELL AND MOLECULAR GENETICS,
(1993 Mar) 19 (2)

171-92.

Journal code: 8403568, ISSN: 0740-7750.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199307

ENTRY DATE: Entered SIN: 19930723

Last Updated on SIN: 19930723

Entered Medline: 19930709

AB: Yeast **artificial chromosomes** (YACs) containing or
lacking a biochemically defined DNA replication origin were
transferred

from yeast to mammalian cells in order to determine whether
origin-dependent autonomous replication would occur. A specialized
YAC

vector was designed to enable selection for YACs in mammalian
cells and

for monitoring YAC abundance in individual mammalian cells. All of
eight

clones made with linear and circularized YACs lacking the origin and
seven

of nine clones made with linear and circularized YACs containing the
origin region contained single copies of the transfected YAC, along
with

various amounts of yeast DNA integrated into single but different

chromosomal sites. By contrast, two transformants derived from circularized YACs containing the putative replication origin showed very heterogeneous YAC copy number and numerous integration sites when analyzed after many generations of in vitro propagation. Analysis of both clones at an early time after fusion revealed variously sized extrachromosomal YAC yeast structures reminiscent of the extrachromosomal elements found in some cell harboring amplified genes. The data are consistent with the interpretation that YACs containing a biochemically defined origin of replication can initially replicate autonomously, followed by integration into multiple chromosomal locations, as has been reported to occur in many examples of gene amplification in mammalian cells.

135 ANSWER 11 OF 28 MEDLINE
ACCESSION NUMBER: 2000019472 MEDLINE
DOCUMENT NUMBER: 20019472 PubMed ID: 10554044
TITLE: B-cell tumorigenesis in mice carrying a yeast **artificial chromosome**-based immunoglobulin heavy c-myc translocus is independent of

the heavy chain intron enhancer (Emu).
AUTHOR: Palomo C, Zou X, Nicholson LC, Butler C, Bruggemann M
CORPORATE SOURCE: Laboratory of Developmental Immunology, The Babraham Institute, Cambridge, United Kingdom.

SOURCE: CANCER RESEARCH (1999 Nov 1) 59 (21) 5625-8.
Journal code: 2984705R ISSN: 0008-5472.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991202

AB: We have used YAC (yeast **artificial chromosome**) technology to create large translocation regions where the c-myc proto-oncogene is coupled to the core region of the human immunoglobulin heavy chain (IgH) locus (from VH2-5 through to Cdelta). Chimeric mice were obtained from embryonic stem cells carrying a single copy of the 240-kb IgH c-myc translocation region. B-cell tumorigenesis occurs in the translocus mice, even when the entire Emu intron enhancer region between the joining segments and switch mu is deleted. This demonstrates that as yet unidentified regulatory elements in the IgH locus, independent from the known enhancers, are sufficient to cause B-cell specific activation of c-myc after translocation. The phenotype of tumors from IgH c-myc YAC transgenic mice with or without Emu (B220+, IgM+, IgD+) is reminiscent of Burkitt's lymphoma. A rapidly expanding abnormal B-cell population is present at birth and accumulates in bone marrow, periphery, and spleen, well before discrete tumor establishment. Molecular analysis identified a clonal origin, with rearrangement of one mouse heavy chain allele retained in tumor cells from different sites, whereas subsequent rearrangements of

heavy or light chain loci can be diverse. These mice routinely develop mature B-cell tumors early in life and may provide an invaluable resource of a B-cell lymphoma model.

135 ANSWER 10 OF 28 MEDLINE
ACCESSION NUMBER: 2000019596 MEDLINE
DOCUMENT NUMBER: 20019596 PubMed ID: 10554168
TITLE: Mammalian **artificial chromosome** pilot production facility: large scale isolation of functional satellite DNA-based **artificial chromosomes**.

AUTHOR: deJong G, Telemus AH, Telemus H, Perez CE, Drayer JL, Hadaczky G
CORPORATE SOURCE: Chromos Molecular Systems, Inc., Vancouver, British Columbia, Canada. gdejong@chromos.com

SOURCE: CYTOMETRY (1999 Feb 1) 35 (2) 129-33.
Journal code: 8102328 ISSN: 0196-4763.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal Article (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199911
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991130

AB: BACKGROUND: A pilot production facility has been established to isolate

mammalian **artificial chromosomes** at high purity by using **flow cytometric** techniques. Dicentric chromosomes have been generated by the targeted amplification of pericentric heterochromatic and centromeric DNA by activating the "megareplicator." Breakage of these dicentric chromosomes generates satellite DNA-based **artificial chromosomes** (SATAC) from 60 to 400 megabases. METHODS: For large-scale production, we have developed cell lines capable of carrying one or two SATACs. A SATAC, because of a high adenine-thymine (AT) composition, is easily identified

and sorted by using chromomycin A3 and Hoechst 33258 stains and a dual laser high-speed flow cytometer. A prototype SATAC (60 megabases) has been characterized. The prototype SATAC has been isolated from an original rodent-human hybrid cell line and transferred by using modified microcell fusion into a CHO production cell line. RESULTS: Metaphase chromosomes from this production cell line were isolated in a modified polyamine buffer, stained, and sorted by using a modified sheath buffer that maintains condensed chromosomes. SATACs are routinely sorted at rates greater than 1 million per hour. Sorted SATACs have been transferred to a variety of cells by using microcell fusion technology and were found to be functional. CONCLUSIONS: By developing new SATAC containing cell lines with fewer numbers of chromosomes in conjunction with operating a high-speed flow sorter we have effectively generated an efficient production facility geared purely for the isolation of SATACs.

135 ANSWER 7 OF 28 MEDLINE
ACCESSION NUMBER: 2001297137 MEDLINE
DOCUMENT NUMBER: 21272265 PubMed ID: 11378850
TITLE: A **flow cytometry** technique for

isolating and sorting mammalian **artificial chromosomes** (SATACs) at high purity by using **flow cytometric** techniques.

measuring chromosome-mediated gene transfer
 AUTHOR Vanderbyl S, MacDougald N, de Jong G
 CORPORATE SOURCE Chromos Molecular Systems, Inc., Burnaby,
 British Columbia,

Canada
 SOURCE CYTOMETRY, (2001 Jun 1) 44 (2) 100-5
 Journal code: 8102328 ISSN: 0196-4763
 PUBLICATION United States
 DOCUMENT TYPE Journal Article; JOURNAL ARTICLE
 LANGUAGE English
 FILE SEGMENT Priority Journals
 ENTRY MONTH 200109
 ENTRY DATE Entered STN: 20011001
 Last Updated on STN: 20011001
 Entered Medline: 20010927

ABSTRACT (CONT'D) Using **artificial chromosome** expression systems (ACes), we have developed a unique and rapid screening technique to quantify delivery of foreign DNA into cells in vitro. Delivery was measured within 24 h after transfection, using **flow cytometry** to detect the transfer of ACes labeled with thymidine analogue. This technique can be used to optimize delivery parameters of

ACes and heterologous DNA into cells and eventually tissue.

METHOD

Chinese hamster ovary (CHO) cells carrying **artificial chromosomes** were grown in media supplemented with iododeoxyuridine (IdUrd). The 60-mb **artificial chromosome** was purified by **flow cytometry** sorting and transfected into Chinese hamster lung fibroblast cells (V79-4) or mouse connective tissue cells [1 Mtk-] using LipofectAMINE 2000 (trade mark), a cationic lipid, and

Superfect (trade mark), a cationic dendrimer. The cells were incubated with

an FITC-conjugated anti-bromodeoxyuridine (BrdUrd) antibody and analyzed

by **flow cytometry**. IdUrd-incorporated

artificial chromosome expressing green fluorescent protein (GFP) was transfected into V79-4 cells. Delivery was

measured at

24 h and GFP expression was detected at 48 h. RESULTS: The delivery of

intact **artificial chromosomes** into V79-4 and 1 Mtk-

cells was detected within 2 h and up to 48 h post-transfection.

Maximum

delivery rates of 20% and 14% were observed using LipofectAMINE 2000 and

Superfect, respectively. **Flow cytometry** data

correlated with microscopic observations. IdUrd incorporation resulted in

less quenching after staining with Hoechst 33258 and chromomycin A3 than

BrdUrd incorporation. The fluorescence intensity of the FITC-conjugated

anti-BrdUrd antibody was greater with IdUrd-incorporated chromosomes than

with BrdUrd-incorporated chromosomes. CONCLUSION: The results indicate

that IdUrd-labeled **artificial chromosomes** can be detected 24 h after transfection. This efficient, sensitive,

high throughput detection technique is being used to evaluate and optimize

other transfer technologies (e.g., electroporation and sonoporation), different delivery reagents, and protocols in a variety of cells in vitro.

This work represents the first step in utilizing **artificial chromosomes** as nonviral vectors for gene therapy.

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DEHS

FILE HOME ENTERED AT 15:05:39 ON 02 OCT 2002

FILE MEDLINE BIOSIS CAPUS ENTERED AT 15:05:47 ON 02 OCT 2002

11 482 S MICROCUTLE-MEDIATED CHROMOSOME

TRANSFER

12 11852 S ELECTROPORATION

13 2 S 11 AND 12

14 2 D UP RE M 13 (6 DUPLICATES REMOVED)

15 173 S ELECTROTRANSFER

16 26 S TRANSFECT AND ELECTRIC

17 2095 S TRANSFECT AND PULSE

18 552069 S CHROMOSOME

19 41 S 17 AND 18

110 23 D UP RE M 19 (18 DUPLICATES REMOVED)

111 13748 S 12 OR 15 OR 17

112 2 S 11 AND 11

113 6 S 112 NOT 13

114 775 S 18 AND 111

115 831822 S MICELLE OR LIPID OR LIPOSOME

116 13 S 114 AND 115

117 9 D UP RE M 16 (4 DUPLICATES REMOVED)

118 825 S 11(S) 15

119 11928 S 12 OR 15

120 477 S 115(S) 19

121 280 D UP RE M 120 (197 DUPLICATES REMOVED)

122 2737 S LARGE DNA

123 6 S 121 AND 122

124 184 S 121 NOT 1999

125 23471 S LAY S OR CELL SORT

126 2 S 11 AND 125

127 2 D UP RE M 126 (6 DUPLICATES REMOVED)

128 1447377 S VACUOLAR MAC

129 9621 S ARTIFICIAL CHROMOSOME

130 17 S 125 AND 129

131 12 D UP RE M 30 (5 DUPLICATES REMOVED)

132 131727 S FLOW CYTOMETRY

133 46 S 129 AND 132

134 29 D UP RE M 133 (17 DUPLICATES REMOVED)

135 28 S 134 NOT 131

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SINCE FILE TOTAL

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FILE 'MEDLINE BIOSIS CAPUS' ENTERED AT 15:05:47 ON
02 OCT 2002

I1 482 S MICROCCELL MEDIATED CHROMOSOME
TRANSFER

I2 11852 S ELLICITROPORATE?

I3 2 S I1 AND I2

I4 2 DUPLICATE 13 (0 DUPLICATES REMOVED)

I5 173 S ELLICITROTRANSFER?

I6 26 S TRANSFECT AND ELECTRIC?

I7 2095 S TRANSFECT AND PULSE

I8 552069 S CHROMOSOME

I9 41 S I7 AND I8

I10 23 DUPLICATE 19 (18 DUPLICATES REMOVED)

I11 13745 S I2 OR I5 OR I7

I12 2 S I11 AND I11

I13 6 S I12 NOT I3

I14 775 S I8 AND I14

I15 831822 S MICELLE OR LIPID OR LIPOsome

I16 13 S I14 AND I15

I17 9 DUPLICATE 16 (4 DUPLICATES REMOVED)

I18 825 S I15 AND I5

I19 11928 S I2 OR I5

I20 477 S I15 AND I9

I21 26 DUPLICATE 120 (197 DUPLICATES REMOVED)

I22 2777 S LARGE DNA

I23 6 S I21 AND I22

I24 184 S I21 NOT PY-1999

I25 23471 S IAC S OR CITE SORT?

I26 2 S I1 AND I25

I27 2 DUPLICATE 126 (0 DUPLICATES REMOVED)

I28 1447377 S YAC? OR MAC?

I29 9621 S ARTIFICIAL CHROMOSOME

I30 17 S I25 AND I29

I31 12 DUPLICATE 36 (5 DUPLICATES REMOVED)

I32 131727 S FLOW CYTOMETRY?

I33 46 S I29 AND I32

I34 29 DUPLICATE 133 (17 DUPLICATES REMOVED)

I35 28 S I34 NOT I31

FILE 'MEDLINE BIOSIS CAPUS' ENTERED AT 16:18:15 ON
02 OCT 2002

<S CHROMOSOME PAINT

I36 372 CHROMOSOME PAINT

<S FISH AND CHROMOSOME
I37 21919 FISH AND CHROMOSOME

S ELLICITROPORATE?
I38 811011 ELLICITROPORATE?

S I37 AND I38
I39 16387 I37 AND I38

S I36 OR I39
I40 16551 I36 OR I39

S I32 OR I25
I41 149247 I32 OR I25

S I40 AND I41
I42 580 I40 AND I41

<D I42 1-10

I42 ANSWER 2 OF 580 MEDLINE

AN 2002442803 MEDLINE

DN 22188894 PubMed ID: 12200682

TI Infant acute lymphoblastic leukemia: combined cytogenetic,
immunophenotypic and molecular analysis of 77 cases.

AU Borkhardt A Wuchter C Viehmann S Pils S Feigler-Schlegel A
Stanulla

M Zimmermann M Ludwig W-D Janka-Schaub G Schrappe M
Harbott J

CS Children's University Hospital, Department of Hematology and
Oncology,

Gessen, Germany
SO LEBERHEIM, (2002 Sep) 16 (9) 1685-90.

Journal code 8704895, ISSN: 0887-6924

CY England; United Kingdom

DI (CLINICAL TRIAL)

Journal: Article: (JOURNAL ARTICLE)

(MULTICENTER STUDY)

LA English

FS Priority Journals

FM 200209

FD Entered STN: 20020830

Last Updated on STN: 20020927

Entered Medline: 20020926

I42 ANSWER 2 OF 580 MEDLINE

AN 2002430654 IN-PROCESS

DN 22175179 PubMed ID: 12187044

TI Chromosomal aberrations in transitional cell carcinoma: its
correlation

with tumor behavior.

AU Yu D-S; Chen H-E; Chang S-Y

CS Uro-Oncology Laboratory, Division of Urology, Department of
Surgery,

Tri-Service General Hospital, National Defense Medical Center,
National

Defense College, Taipei, Taiwan ROC.

SO UROLOGIA INTERNATIONALIS, (2002) 69 (2) 129-35.

Journal code 0417373, ISSN: 0042-1138.

CY Switzerland

DI Journal: Article: (JOURNAL ARTICLE)

LA English

FS IN-PROCESS, NONINDEXED, Priority Journals

FD Entered STN: 20020821

Last Updated on STN: 20020821

I42 ANSWER 2 OF 580 MEDLINE

AN 2002378813 IN-PROCESS

DN 22120540 PubMed ID: 12124698

TI Fetal gender and aneuploidy detection using fetal cells in maternal
blood;

analysis of X,Y,Y data.

AL - Bianchi DW, Simpson JL, Jackson L G, Elias S, Holzgreve W, Evans ML

DUKE EA, Sudhva J L, Klinger K W, Bischoff F Z, Hahn S, Johnsen K L

LEVIN D, Wapner R J, Cripe E D de la

CS - Division of Genetics, Departments of Pediatrics, Obstetrics and Gynecology, Tufts University School of Medicine, Boston, MA, USA

SO - PEDIATRIC DIAGNOSIS, (2002 Jul) 22 (7) 609-17

Journal code: 8706540, ISSN: 0197-7851

CY - England: United Kingdom

DI - Journal Article; (JOURNAL ARTICLE)

LA - English

PS - PEDIATRICS, NONPRIORITY, Priority Journals

FD - Entered SIN: 20020719

Last Updated on SIN: 20020719

142 ANSWER 4 OF 580 - MEDLINE

AN - 2002366465 - MEDLINE

DN - 22165847 - PubMed ID: 12110498

TI - Lack of interstitial **chromosome** 1p deletions in clinically-detected neuroblastoma

AL - Godfried M B, Veenstra M, Venter A, Sluis P A, Voute P A, Versteeg R

Caton H N

CS - Department of Human Genetics, Academic Medical Center, University of

Amsterdam, PO Box 22700, 1100 DE, Amsterdam, The Netherlands

SO - EUROPEAN JOURNAL OF CANCER, (2002 Jul) 38 (11) 1513-9

Journal code: 0905273, ISSN: 0959-8049

CY - England: United Kingdom

DI - Journal Article; (JOURNAL ARTICLE)

LA - English

PS - Priority Journals

FM - 200209

FD - Entered SIN: 20020712

Last Updated on SIN: 20020914

Entered Medline: 20020913

142 ANSWER 5 OF 580 - MEDLINE

AN - 2002269316 - MEDLINE

DN - 21940337 - PubMed ID: 11943340

TI - Cytogenetic characterization of complex karyotypes in seven established

melanoma cell lines by multiplex **fluorescence** in situ hybridization and DAPI banding

AL - Schulten Hans Jorgen, Ganawan Bastian, Otto Friedrich, Hassmann Rene

Hallermann Christian, Noebel Albrecht, Fuzesi Laszlo

CS - Department of Pathology, Georg August University, Göttingen, Germany

SO - CANCER GENETICS AND CYTOGENETICS, (2002 Mar) 133 (2) 134-41

Journal code: 7009240, ISSN: 0165-4608

CY - United States

DI - Journal Article; (JOURNAL ARTICLE)

LA - English

PS - Priority Journals

FM - 200205

FD - Entered SIN: 20020412

Last Updated on SIN: 20020503

Entered Medline: 20020502

142 ANSWER 6 OF 580 - MEDLINE

AN - 2002199321 - MEDLINE

DN - 21929627 - PubMed ID: 11933265

TI - Quantitative **FISH** analysis on interphase nuclei may improve diagnosis of DNA diploid breast cancers

AL - Truong Khuong, Vielh Philippe, Guilly Marie-Noëlle, Kljamenko Jerzy

Sastre-Garau Xavier, Soussaline Françoise, Dutrillaux Bernard, Malo

Bernard

CS - Cytogénétique moléculaire et Oncologie, Unité Mixte de Recherche

147

Centre National de Recherche Scientifique-Institut Curie, Paris, France

Khuong Truong a curie fr

SO - DIAGNOSTIC CYTOPATHOLOGY, (2002 Apr) 26 (4) 213-6

Journal code: 8506895, ISSN: 8755-1039

CY - United States

DI - Journal Article; (JOURNAL ARTICLE)

LA - English

PS - Priority Journals

FM - 200207

FD - Entered SIN: 20020405

Last Updated on SIN: 20020703

Entered Medline: 20020702

142 ANSWER 7 OF 580 - MEDLINE

AN - 2002159582 - MEDLINE

DN - 21888357 - PubMed ID: 11890998

TI - Interphase **fluorescence** in situ hybridization and DNA **flow cytometry** analysis of medulloblastomas with a normal karyotype

AL - Rajcan-Separovic Evica, Hendson Glenda, Tang Steven, Seto Emily, Thomson

Toni, Phillips Don, Kalousek Dagmar

CS - Department of Pathology, British Columbia's Children's Hospital, 4480 Oak

Street, V6H 3V4, BC, Vancouver, Canada -separovic a cw.bc.ca

SO - CANCER GENETICS AND CYTOGENETICS, (2002 Feb) 133 (1) 94-7

Journal code: 7009240, ISSN: 0165-4608

CY - United States

DI - Journal Article; (JOURNAL ARTICLE)

LA - English

PS - Priority Journals

FM - 200203

FD - Entered SIN: 20020314

Last Updated on SIN: 20020403

Entered Medline: 20020327

142 ANSWER 8 OF 580 - MEDLINE

AN - 2002120528 - MEDLINE

DN - 21671061 - PubMed ID: 11813198

TI - Telomere length measurement by **fluorescence** in situ hybridization and **flow cytometry**: tips and pitfalls

AL - Bacriocher Gabriela M, Mak Jennifer, Tien Teri, Lansdorp Peter M

CS - Terry Fox Laboratory, British Columbia Cancer Agency, Vancouver, British

Columbia, Canada

NC - A129524 (NIAID)

SO - CYTOMETRY, (2002 Feb) 147 (2) 89-99

Journal code: 8102328, ISSN: 0196-4763

CY - United States

DI - Journal Article; (JOURNAL ARTICLE)

LA - English

PS - Priority Journals

FM - 200204

FD - Entered SIN: 20020222

Last Updated on SIN: 20020406

Entered Medline: 20020405

142 ANSWER 9 OF 580 - MEDLINE

AN - 2002036247 - MEDLINE

DN - 21598123 - PubMed ID: 11767759

TI - Evaluation of three somatic genetic biomarkers as indicators of low dose

radiation effects in clean-up workers of the Chernobyl nuclear reactor accident

AL - Jones I M, Tucker J D, Tanglos R G, Mendelsohn M L, Pleshanov P, Nelson D

O

CS - Biology and Biotechnology Research Program, L-441 Lawrence Livermore

National Laboratory, Livermore, California, USA -jones20@llnl.gov

NC - P01 CAS9471 (NCI)
SO - Radiat Prot Dosimetry, (2001) 97 (1) 61-7
Journal code: 8109955, ISSN: 0144-8420
CY - England, United Kingdom
DI - (EVALUATION STUDIES)
Journal: Article: (JOURNAL ARTICLE)

LA - English
FS - Priority Journals
IM - 200204
ID - Entered S1N: 2002-024
Fast Updated on S1N: 20020424
Entered Medline: 20-20423

142 ANSWER 1 OF 3 - MEDLINE
AN - 2002035938 - MEDLINE
DN - 21604146 - PubMed ID: 11763711

TI - Use of novel t(11;14) and t(14;18) dual fusion **fluorescence** in situ hybridization probes in the differential diagnosis of lymphomas of

small lymphocytes.
AU - Frater JT, Tsipisakos EK, Hsieh D, Pettay J, Tubbs RR
CS - Department of Clinical Pathology, Cleveland Clinic Foundation, Ohio 44195.

USA
SO - DIAGNOSTIC MOLECULAR PATHOLOGY, (2001 Dec) 10 (4): 214-22.

Journal code: 9204024, ISSN: 1052-9551.

CY - United States
DI - (EVALUATION STUDIES)
Journal: Article: (JOURNAL ARTICLE)

LA - English
FS - Priority Journals
IM - 200205
ID - Entered S1N: 20020624
Fast Updated on S1N: 20020507
Entered Medline: 20020502

-D HIS

(FILE HOME) ENTERED AT 15:05:39 ON 02 OCT 2002

FILE MEDLINE BIOSIS, CAPUS ENTERED AT 15:05:47 ON 02 OCT 2002

11 - 482 S MICROCELL MEDIATED CHROMOSOME TRANSFER
12 - 11852 S EFFECTOR PRACTICE
13 - 2 S L1 AND L2
14 - 2 DUP REM L3 (6 DUPLICATES REMOVED)
15 - 173 S ELECTROTRANSFECT?
16 - 26 S TRANSFECT AND ELECTRIC?
17 - 2095 S TRANSFECT? AND PULSE
18 - 552069 S CHROMOSOME
19 - 41 S L7 AND L8
110 - 23 DUP REM L9 (18 DUPLICATES REMOVED)
111 - 13748 S L2 OR L5 OR L7
112 - 2 S L11 AND L13
113 - 6 S L12 AND L13
114 - 775 S L8 AND L11
115 - 831822 S MOBILE OR LIPID OR LIPOSOME
116 - 13 S L14 AND L15
117 - 9 DUP REM L16 (4 DUPLICATES REMOVED)
118 - 825 S L17 AND L18
119 - 11928 S L2 OR L5
120 - 477 S L17 AND L19
121 - 280 DUP REM L20 (197 DUPLICATES REMOVED)
122 - 2737 S LARGE DNA
123 - 6 S L21 AND L22
124 - 184 S L2 - NOT PY -1999
125 - 23471 S FACS OR CELL SORT?
126 - 2 S L11 AND L25
127 - 2 DUP REM L26 (6 DUPLICATES REMOVED)
128 - 1447377 S YAC? OR MAC?
129 - 9621 S ARTIFICIAL CHROMOSOME

130 - 17 S L25 AND L29
131 - 12 DUP REM L30 (5 DUPLICATES REMOVED)
132 - 131727 S FLOW CYTOMETRY?
133 - 46 S L29 AND L32
134 - 29 DUP REM L33 (17 DUPLICATES REMOVED)
135 - 28 S L34 AND L31

FILE MEDLINE BIOSIS, CAPUS ENTERED AT 16:18:15 ON 02 OCT 2002

136 - 372 S CHROMOSOME PAINT
137 - 21919 S FISH AND CHROMOSOME
138 - 811011 S FLUORESC?
139 - 16787 S L17 AND L38
140 - 16551 S L36 OR L29
141 - 49247 S L2 OR L25
142 - 580 S L40 AND L41

-S TRANSFER OR TRANSFECT?

143 - 1196774 TRANSFER OR TRANSFECT?

-S L42 AND L43

144 - 3 L42 AND L43

-D DUP REM L44

PROCESSING COMPLETED FOR L44

145 - 3 DUP REM L44 (6 DUPLICATES REMOVED)

-D HIS L43

145 ANSWER 1 OF 3 - MEDLINE

TI - Molecular cloning and immunogenicity of renal cell carcinoma-associated antigen G250.

SO - INTERNATIONAL JOURNAL OF CANCER, (2000 Mar 15) 85 (6) 865-70

Journal code: 0042124, ISSN: 0020-7136.

145 ANSWER 2 OF 3 - MEDLINE

TI - Generation of transgenic mice and germline transmission of a mammalian artificial **chromosome** introduced into embryos by pronuclear micromanipulation

SO - CHROMOSOME RESEARCH, (2000) 8 (3) 183-91.

Journal code: 9313452, ISSN: 0967-3849.

145 ANSWER 3 OF 3 - MEDLINE

TI - Dendritic cells generated from blood precursors of chronic myelogenous leukemia patients carry the Philadelphia translocation and can induce a CML-specific primary cytotoxic T-cell response.

SO - GENES, CHROMOSOMES AND CANCER, (1997 Nov) 20 (3): 215-23.

Journal code: 9007-29, ISSN: 1045-2257.

-D HIS

(FILE HOME) ENTERED AT 15:05:39 ON 02 OCT 2002

FILE MEDLINE BIOSIS, CAPUS ENTERED AT 15:05:47 ON 02 OCT 2002

11 - 482 S MICROCELL MEDIATED CHROMOSOME TRANSFER
12 - 11852 S EFFECTOR PRACTICE
13 - 2 S L1 AND L2
14 - 2 DUP REM L3 (6 DUPLICATES REMOVED)
15 - 173 S ELECTROTRANSFECT?
16 - 26 S TRANSFECT AND ELECTRIC?
17 - 2095 S TRANSFECT? AND PULSE
18 - 552069 S CHROMOSOME
19 - 41 S L7 AND L8
110 - 23 DUP REM L9 (18 DUPLICATES REMOVED)
111 - 13748 S L2 OR L5 OR L7

112 2 S111 AND11
 113 6 S112 NOT11
 114 775 S18 AND11
 115 83822 SMI111 OR LIPID OR LIPOSONE
 116 11 S114 AND115
 117 9 DUP REM116 (4 DUPLICATES REMOVED)
 118 825 S1116 S115
 119 11928 S12 OP11
 120 477 S118 S119
 121 280 DUP REM120 (97 DUPLICATES REMOVED)
 122 2737 S1 AF11 DNA
 123 6 S121 AND122
 124 184 S121 NOT121 1999
 125 23471 S1 ACS OR CEE SORT1
 126 2 S11 AND125
 127 2 DUP REM126 (0 DUPLICATES REMOVED)
 128 144777 SYAC? OR MAC?
 129 9621 S AK111111 CHROMOSOME
 130 17 S125 AND129
 131 12 DUP REM130 (5 DUPLICATES REMOVED)
 132 131727 S FLOW CYTOM11R?
 133 46 S129 AND132
 134 29 DUP REM133 (17 DUPLICATES REMOVED)
 135 28 S134 NOT131

THE "MEDLINE BIOSIS" CAPUS ENTERED AT 16:18:15 ON
 02 OCT 2002

136 372 S CHROMOSOME PAINT
 137 21919 S FISH AND CHROMOSOME
 138 817011 S FLORESC?
 139 16387 S127 AND138
 140 16551 S126 OR139
 141 149247 S132 OP125
 142 580 S140 AND141
 143 1196774 S TRANSFER OR TRANSFECT?
 144 2 S142 AND143
 145 2 DUP REM144 (0 DUPLICATES REMOVED)

-- LOG HOLD

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	18.62	334.52

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
	ENTRY
CA SUBSCRIBER PRICE	0.00
	-8.67

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 STN INTERNATIONAL SESSION SUSPENDED AT 16:24:45 ON 02
 OCT 2002